Leased Space Requirements

Revised January 1999

This document comprises the standard requirements and performance criteria that lessors shall provide to the State on all State projects. This document is to be used only as a reference when preparing preliminary development of a response to the State when leased space is solicited by DRES.

A specific approved project will reiterate this same document, but will have a cover sheet identifying the specific project number, name, address, DRES project members, and a block with the project team members and DRES management approval signatures. Any documents without this information are not considered official.

Any approved revisions to these standards will be documented in the form of Addenda, which, if used, will be attached to this document only at the time when a specific project is released for consideration under the criteria noted above.

All DSHS projects will have their standard addendum attached.

Washington State Department of
General Administration
Division of Real Estate Services

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PART A GENERAL INFORMATION

A1 DEFINITIONS

A1.1 ADDITIONAL TENANT IMPROVEMENTS
Specific State Agency requirements that exceed the State's basic requirements delineated in Part A5 are additional tenant improvements to the leased space. Lessor shall separate these costs from basic requirements on Construction Bid Cost Breakdown Form. See Part B.

A1.2 APPROVAL
Review and acceptance by DRES Architect that the design, specifications, products, and installation meet all the requirements of the project.

A1.3 BASIC REQUIREMENTS
Work required to meet the basic building requirements for a leased facility as described in Parts A4 and A5. The costs associated with this work are included in the base lease rate.

A1.4 B.O.M.A.
Acronym for Building Owners and Managers Association. Their measurement calculations are approved by the American National Standards Institute, Inc. and accepted nationwide as a standard method of measuring and calculating building space.

A1.5 OPEN OFFICE AREA STANDARDS
In areas of open office, cubicle panels over 66 inches high or with a space less than 3'-0" between ceiling and top of panel will be considered hard walls ("partitions") and will conform to the Space Standards Manual for private office allocation purposes. All hard walls are to be located near the interior of the space with exterior windows reserved for open office areas.

A1.6 PUNCHLIST
An itemized listing of incomplete work and/or deficiencies which the Lessor is obligated to resolve based on the project's approved plans and specifications, as observed and documented by the DRES Architect.

A1.7 REVIEW
Examination by the DRES Architect to determine if submittal or construction is consistent with project design and specifications. Review does not relieve Lessor or Contractor of code or project requirements, nor Architect's oversight.

A1.8 SUBSTANTIAL COMPLETION
A determination made by the DRES Architect subsequent to the punchlist inspection that the Lessor has sufficiently completed enough of the project requirements so that the Agency can safely occupy and function thoroughly in the facility. Receipt of the municipal occupancy permit is required to achieve substantial completion, even though some punchlist items may still be outstanding.

A1.9 PROJECT TEAM
The Project Team consists of a core group of people whose charge or responsibility is to implement, approve, and carry out all facets of the project, from lease negotiations for acquiring leased space to final acceptance of the built facility. The approval of any directives for any phase of the project must originate with this group. The Project Team consists of the DRES Project Leader, the DRES Architect, the Agency Facility Planner, and one representative of the Tenant Agency. The Project Team works directly with the Lessor or Lessor's designee.

A2 LESSOR'S PROPOSAL INFORMATION

The following, with any addenda, are the minimum State requirements for all spaces to be leased to the State of Washington, and shall be included in the lessor's proposal. (See also A4 and A5)

A2.1 CODE COMPLIANCE

All spaces leased to the State of Washington shall meet or exceed all applicable local governing codes, including, but not limited to, Washington State Regulations for Accessibility (WAC 51-40), Washington State Energy Code (WAC 51-11), Ventilation and Indoor Air Quality Code (WAC 51-13), Prevailing Wages on Public Works (RCW 39.04), and the State Uniform Building Code. All improvements required to meet these codes are the financial responsibility of the Lessor.

Lessor agrees to pay the prevailing rate of wage to all workers, laborers, or mechanics employed in the performance of any part of this agreement unless specifically exempted by L&I. Lessor agrees to comply with the provisions of RCW 39.12 when required under RCW 39.04.260 and the rules and regulations of the Department of Labor and Industries.

A2.2 PREPARATION OF PLANS AND SPECIFICATIONS

Lessor shall provide complete as-built drawings (including mechanical and electrical) of existing buildings to DRES Project Leader, indicating the most current building information and configuration, and drawn accurately and to scale (1/8"=1'-0" or 1/4"=1'-0" preferred). These drawings shall be submitted on either reproducible medium or on a computer disk in a format compatible with the latest release (version) of AutoCAD (preferred method). Lease exhibit plans and performance specifications will be approved and released by DRES for each State-leased facility requiring buildout. **Changes to these documents are not permitted without written approval from the DRES Architect.** Lessor is responsible for preparing construction documents, which may include plans and specifications by a licensed architect and/or engineer, as required by the governing building department for permits and construction.

A2.3 LIFE CYCLE COST ANALYSIS

Spaces exceeding 25,000 square feet require a Life Cycle Cost Analysis, as described in RCW 39.35B. (See Section 01060)

A2.4 YEAR 2000 COMPLIANCE

All building systems controls which are time or date sensitive shall be "Year 2000 compliant".

"Year 2000 compliant" means the functions, calculations, and other computing processes of the systems controls perform in a consistent manner regardless of the Date Data input to the systems controls, whether before, on, during or after January 1, 2000, and whether or not the Date Data is affected by leap years.

"Date Data" means any data, formula, algorithm, process, input or output which includes, calculates, or represents a date, a reference to a date, or a representation of a date; including, but not limited to the following:

No value for current date will cause any interruption in operation. Current date means today's date as known to the equipment or product.

Date-based functionality will behave consistently for dates prior to, during, and after year 2000. General date integrity will include, but is not limited to:

1999/09/09	
1999/12/31	
2000/01/01	Saturday and not Monday as in 1900/01/01
2000/01/02	Sunday and not Tuesday as in 1900/01/02
2000/02/29	Tuesday
2000/03/01	Wednesday
2000/12/31	
2001/01/01	

Year 2000 is recognized as a leap year.

Dates will roll over correctly from/to:

1998/12/31 to 1999/01/01
1999/12/31 to 2000/01/01
2000/02/28 to 2000/02/29
2000/02/29 to 2000/03/01

In all interfaces and data storage, the century in any date will be specified either explicitly or by unambiguous algorithms or inference rule.

A3 LEASE COMPUTATIONS AND MEASUREMENTS

The June 7, 1996 edition of the Building Owners and Managers Association (B.O.M.A.) "Standard Method for Measuring Floor Area in Office Buildings" will be the criteria for determining the leased square footage area for all office and warehouse space leased to the State of Washington.

When the State is considering to lease one hundred percent (100%) of the building, the State will use square footage calculations of the "GROSS BUILDING AREA" of the building. When the State is considering to lease less than one hundred percent (100%) of the building, itemized square footage calculations of the B.O.M.A. "USABLE AREA" will be used to determine areas unless specified otherwise.

A4 SUMMARY OF BASIC SITE REQUIREMENTS

A4.1 PARKING
The number of required parking spaces will be determined by the regulations of the local zoning ordinance. Provide marked loading areas, and marked parking stalls with barrier-free access per WAC 51-40. All required parking and loading spaces shall be striped, asphalt or concrete. (See Sections 02500 and 10400).

A4.2 SITE ILLUMINATION
Provide full coverage site illumination for tenant safety, as described in Section 16520.

A4.3 REFUSE RECEPTACLE
Provide refuse receptacle(s) and location for them as described in Section 11170.

A4.4 FLAGPOLES
Provide aluminum flagpoles as described in Section 10350, where tenant agencies lease 100% of the building.

A4.5 LANDSCAPING
For new construction and change-of-use facilities, provide landscaping per local zoning requirements. (See Section 02900)

A5 SUMMARY OF BASIC REQUIREMENTS FOR THE BUILDING

A summary description of all proposed spaces planned for the buildout of this facility may be found in the Space Planning Data Sheet attachment to the Agency Space Request. Contact the DRES Project Leader.

A5.1 FLOOR CONSTRUCTION

Floors are not acceptable if excessive vibration or vertical motion is present. All non-slab on-grade floors will be reviewed by the DRES Architect or designee to determine if vibration or vertical movement is within acceptable levels for state occupancy. Floors shall be smooth and level, with no more than one-eighth inch (1/8") variation in eight feet (8') horizontal.

A5.2 FLOOR LOADING

In all general office occupancies, provide a minimum floor structure loading design of 85 pounds per square foot uniform live load, plus all applicable additional dead load requirements, including 20 pounds per square foot uniformly distributed dead load for partitions. For new construction, live load deflection of the floor system shall not exceed (L)/480 for spans up to 15 feet and (L)/600 for spans 15 feet and over when member is fully loaded. For existing construction, deflection shall not exceed L/360 when member is fully loaded.

A5.3 PARTITIONS

Provide walls and partitions for restrooms, stairs, elevator and elevator machine rooms, mechanical shafts, conference, training, and voice/data/equipment rooms, including sound attenuation as specified in Section 07200, 1.2. All demising walls between the state-leased facility and any adjacent interior spaces (used or unused) shall extend from the floor to the underside of the roof structure and be fully sound-attenuated as described in Section 07200, 1.2. In addition, provide 75 lineal feet of interior partitions for each 1,000 leased square feet. (See Section 09250).

A5.4 INTERIOR DOORS

Provide all entrance and exit doors. Provide doors for stairways, restrooms, janitor and voice/data/equipment rooms. In addition, provide one (1) door for each four hundred (400) leased square feet. Doors to be complete including frames, trim, 1-3/4" solid-core hardwood veneer (except mahogany), 1-1/2 pair hinges, lever lock or latch, wall stop, silencers, closer, and smoke seals where required. Provide locks for security and utility doors, and twenty-five percent (25%) of the additional doors. (See Section 08000) In addition, for remodels of existing spaces provide lever hardware at all doors along the facility's accessible path of travel, as determined by the DRES Architect.

A5.5 RELIGHTS

Provide twenty (20) square feet of door and/or wall relights per one thousand (1,000) square feet of leased floor space. Unless otherwise noted on the plans, the average size of each wall relight should be 3'-0" x 4'-0" and door relights should be 2'-0" x 3'-0". (See Sections 08100 and 08200)

A5.6 FLOOR COVERING

In all office occupancies, provide carpet and base as specified in Sections 09680 and 09650, 1.7. Provide ceramic tile flooring and wainscoting in all restrooms as specified in Sections 09000 and 09300; for leased space under 10,000 square feet, sheet vinyl flooring and plastic laminate wainscot may be substituted. Provide vinyl composition tile in utility areas as specified in Section 09650. Provide tire tile or project-approved slip-resistant flooring at entrances.

A5.7 COFFEE BARS

Provide one (1) coffee bar per floor for each leased space. Provide second coffee bar for leased space over 10,000 square feet per floor. Each coffee bar shall be 48" to 96” long, including self-rimming stainless steel sink with instant hot water dispenser. Provide as described in Sections 06400, 15440 and 15450.

A5.8 EXTERIOR WINDOWS

Provide equally distributed glazing amounting to a minimum of five percent (5%) of the floor area. Provide blinds on all exterior windows, as specified in Section 12500. Provide moisture resistant sills at all new construction, as specified in Section 06200 or 06600.

A5.9 SIGNS

Provide tenant identification, Agency-specific signs for public and staff entrances and elevator lobbies. Provide signs and directories as specified. (See Section 10400)

A5.10 CEILING

Provide complete ceiling system, including suspended grid and high NRC tile as specified in Sections 09000, 1.3.3 and 09500; and including lighting as specified in Sections 16500, 16510, and 16520.

A5.11 HEATING, VENTILATING AND AIR CONDITIONING (HVAC) SYSTEMS

For all portions of the State leased space, provide an HVAC system(s) complying with all applicable provisions of Section 15500**.** All plenum return systems must utilize plenum-rated materials as required by codes. Fiberglass materials are subject to Section 15500, 1.3.

Return air plenums, ducts and air handling equipment shall be inspected by a qualified professional and certified as acceptably clean. Cleaning and/or certification shall be performed at lease inception and lease renewal, but not less than five years. Submit a written maintenance agreement with a qualified vendor for the term of the lease, including filter change schedule. Provide a copy to the Agency of Vendor's work order or invoice for filter change and maintenance.

A5.12 ENERGY MANAGEMENT SYSTEM (E.M.S.)

Provide a Direct Digital Control (DDC) E.M.S. on all new leased space over 25,000 square feet. The E.M.S. shall control lighting and all HVAC equipment including exhaust fans.

A5.13 ELECTRICAL SERVICE TO BUILDING

Provide building electrical service and distribution system, including panels and subpanels, based on 3.5 watts per square foot for duplex receptacles, plus all other electrical loads. Do not locate transformers within fifteen feet (15'-0") of a voice/data/equipment room. Do not locate microwave ovens, electric panels, or wiring in non-metallic conduit closer than three feet (3'-0") from a voice/data/equipment room. (See Division 16)

A5.14 ELECTRICAL RECEPTACLES

Provide circuitry and one (1) standard-power duplex receptacle for each 75 square feet of leased space. All circuits shall have a minimum capacity of 20 amps each. Up to fifty percent (50%) of all required duplex receptacles may be DRES-approved durable flush-floor receptacles. Five percent (5%) of the required receptacles may be dedicated 20 amp receptacles. Provide a maximum of six (6) duplex receptacles on each non-dedicated circuit; a fourplex receptacle will be calculated as 1.5 duplex receptacles. Additional circuits, isolated-ground circuits and receptacles, and special receptacles (30 amp and above) are Additional Tenant Improvements when shown on DRES approved drawings or change order. (See additional requirements in Division 16)

A5.15 SERVICE POLES

Service Poles (power duct posts) are acceptable only at existing slab-on-grade construction or where pre-approved in writing by the DRES Architect. At locations specified on the approved plans, provide Service Poles in lieu of floor fixtures. Where Tenant Agency is providing electrified Systems Furniture, provide "hot" junction boxes at ceiling, walls, or floor, as indicated on drawings. Install the Systems Furniture connections (supplied by state vendor) to the "hot" boxes. Provide connection points in lieu of floor fixtures. Provide a maximum of six (6) standard duplex receptacles on each non-dedicated circuit. (See A5.14 above and Section 16610)

A5.16 TELEPHONES AND COMPUTERS (VOICE/DATA CABLES AND RECEPTACLES)

Lessor shall provide one (1) combined-use rough-in outlet (1" conduit with J-Box) for each 150 leased square feet. Up to 50% of all required voice/data outlets may be DRES-approved durable flush-floor receptacles. Cable, installation, and trim-out to be by state Agency's vendor, or as an Additional Tenant Improvement. Also provide adequate plywood equipment board for Tenant Agency's use in the voice/data/equipment room. (See Section 06200)

A5.17 ROOF

Provide a roof assembly that is free from leaks. Promptly and properly repair leak damage. (See Section 07500)

A5.18 PLUMBING ACCESSORIES & SPECIALTY HARDWARE

Provide toilet cubicles, toilet accessories, fire extinguishers, and other specialty items required by code and design. If additional plumbing facilities are constructed above applicable code minimum, solely to comply with DRES-approved drawings, those costs are the Tenant Agency's responsibility as Additional Tenant Improvements. Basic requirements

provided by Lessor include: grab bars, toilet paper dispensers, seat cover dispensers, sanitary napkin disposal, soap dispensers, towel dispensers (or hand dryers), waste receptacles, and mirrors. (See Section 10800)

A5.19 VOICE/DATA/EQUIPMENT ROOMS

Lessor shall provide voice/data/equipment room as described in Section 16700, with the location as approved by DRES Architect or as shown on the DRES drawing. The room shall have a separate HVAC system (except as noted in 15500, 1.3.1), and shall be maintained at a temperature range of 50° - 80° F. with 30 - 55% relative humidity.

A5.20 DEMOLITION

For new leases, Lessor must demolish all partition walls which do not meet State standards. In addition, for existing walls which do meet current State specifications and codes, Lessor may also be required to demolish up to ten (10) l.f. per 1000 sf of leased area in order to carry out the approved space design. This includes the removal of doors, relights, casework, electrical receptacles, telephone and communication (data) outlets, etc, within these walls.

End of Part A

PART B UNIT COST CALCULATIONS

B1 CONSTRUCTION BID COST BREAKDOWN FORM

Refer to Part A for basic requirements of the site and building. Refer to Divisions 1 through 16 for minimum performance and quality specifications.

The Lessor is required to submit a Construction Bid Cost Breakdown form, detailing costs for work to accomplish the approved plans and specifications. This is to be submitted on the Construction Bid Cost Breakdown Form, either the "long form", "short form", or other format approved by the DRES Architect. DRES will approve or reject all Additional Tenant Improvement costs. Additionally, DRES reserves the right to request alternate bids. If agreement between the Lessor and the State cannot be reached, the State reserves the right to reject the proposal.

The "short form" for projects of limited scope is attached. Ask the DRES Architect for the "long form" for larger or more detailed projects, or additional "short form" copies.

There is a completed sample of a short form Construction Bid Cost Breakdown Form on the next page. The following is an explanation of some of the items on that sample:

GWB Walls--Part **A5.3 PARTITIONS** states: "Provide 75 lineal feet of interior partitions for each 1,000 leased square feet." Thus 12,592 sq. ft. ÷ 1000 = 12.59 x 75 = 944 lineal feet of partition allowance. The approved plan has 980 lineal feet of new walls. 980 l.f. - 944 l.f. = 36 l.f. at Agency cost. 36 x $45/l.f. = $1,620. (Agency cost for partitions found in the "Additional Tenant" column)

Interior Doors--Part **A5.4 INTERIOR DOORS** states*:* "Provide one door for each 400 leased square feet*."* Thus. 12,592 ÷ 400 = 31 doors allowed. The approved plan has 35 doors. 35 - 31 = 4 at Agency cost. 4 x $525/door = $2,100 (Agency cost for doors found in the "Additional Tenant" column)

The subtotal reflects the additional tenant costs. The general contractor's overhead and profit and sales tax is added and the total cost to the Agency is written on the "Total" line. Sign and date the form in the "Owner/Lessor" box near the bottom of the page. Return the completed form to the DRES Architect.

Call the DRES Architect if you have any questions regarding form completion.

End of Part B

Construction Bid Cost Breakdown Form

Project # 400-06-96	Address 21233 Hogart Rd	DRES Architect Wright
SR&L# 9966	City Whereville	DRES Lease Agent Stone
Agency SIS	SF Leased Area 12,592 *B.O.M.A. Usable*	Agency Facility Planner J. Smith
Lessor & Phone # Trump (360) 777-5516		Date 1/22/98
Contractor & Phone # U. S. Stiehl (360) 886-2255		Revised Date

Item	Total Units	Unit Cost	Total Cost	Basic Reqmts # or %	Basic Reqmts $ Cost	Add'l Tenant # or %	Add'l Tenant $ Cost
GWB Walls	980 LF	$45	$44,100	944	42,480.00	36	1,620.00
Interior Doors	35	525	18,375	31	16,275.00	4	2,100.00
Electrical							
Standard Power Receptacles	140	65	9,100	100	9,100.00		
Isolated Ground Receptacles	58	90	5,220			100	5,220.00
Dedicated Power Receptacles	12	75	900	8	600.00	4	300.00
Phone/Data Rough-ins	60	45	2,700	100	2,700.00		
Reception Counter	1		2,250			100	2,250.00
Coffee Bars	3	4000	12,000	2	8,000.00	1	4,000.00
Relights	316	20	6,320	252	5,040.00	64	1,280.00
General Contractor's Subtotal			$100,965.00		$84,195.00		$16,770.00
General Contractor's Overhead & Profit			$10,096.50		8,419.50		1,677.00
(8.0%) Sales Tax			$8,884.92		7,409.16		1,475.76
Total			$119,946.42		$100,023.66		$19,922.76

Method of Payment: (For DRES use only) Cash upon project completion.

Approvals

DRES Architect	DRES Lease Agent	Agency Facility Planner	Owner/Lessor
Date	Date	Date	Date

Lessor/Private party to comply with the applicable prevailing wage provisions of RCW 39.04.260. IP EX

Construction Bid Cost Breakdown Form

Project #	Address	DRES Architect
SR&L#	City	DRES Lease Agent
Agency	Square Feet Leased Area	Agency Facility Planner
Lessor & Phone #		Date
Contractor & Phone #		Revised Date

Item	Total Units	Unit Cost	Total Cost	Basic Reqmts %	Basic Reqmts $ Cost	Add'l Tenant %	Add'l Tenant $ Cost
General Contractor's Subtotal							
General Contractor's Overhead & Profit							
(%) Sales Tax							
Total							

Method of Payment: (For DRES use only) Cash upon project completion.

Approvals

DRES Architect	DRES Lease Agent	Agency Facility Planner	Owner/Lessor
Date	Date	Date	Date

Lessor/Private party to comply with the applicable prevailing wage provisions of RCW 39.04.260. IP EX

PART C SPECIFICATIONS

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01010 - SUMMARY OF WORK AND PROCEDURES

1.1 GENERAL

The following are the State's minimum quality standards for construction materials, assemblies and equipment. The Division of Real Estate Services (DRES) will release final approved plans and specifications reflecting each project's requirements to the Lessor.

These are performance specifications. All items required to provide a complete, operational and fully-functional facility meeting all approved codes are to be included as a part of this project unless stated otherwise. These specifications are generic and apply to a broad range of projects. Some items may not be required on all projects (such as exterior doors when the project involves only interior work). Additional items are required, even if not enumerated in these specifications, if shown on plan. **Final determination of applicable requirements is the sole responsibility of the DRES Architect.**

1.2 CONTRACT DOCUMENTS

These specifications, including any addenda, along with DRES-approved drawings, summarize the requirements. Any changes to these specifications may only be made in writing by the DRES Architect.

DRES drawings will be limited to one sheet per floor whenever possible. Drawings will include DRES and Tenant Agency approval signatures, and B.O.M.A. square footage area(s) will be indicated in the lower right hand corner of the sheet.

It is the Lessor’s responsibility to provide construction documents prepared by a licensed Architect, if required by local code authority. Submit permit/construction drawings and specifications to DRES Architect.

1.3 CONSTRUCTION REQUIREMENTS

Comply with DRES-approved drawings and specifications and basic site & building requirements.

1.3.1 EXTERIOR OF EXISTING BUILDINGS

All new work on building exteriors shall comply with Washington State Energy Code (WAC 51-11), and all other applicable codes and requirements. Existing buildings with a change of use or occupancy may require added insulation and/or glazing for the new use or occupancy. Additions are to match existing adjacent structure whenever possible. Lessor guarantees that existing structure is constructed and maintained to resist penetration of the elements.

1.4 COST SUBMITTALS; CHANGES AND REVISIONS; CHANGE ORDERS

Any cost submittal, change, interpretation of requirements, or revision to the work must be authorized by the DRES Architect. Any proposed change or revision to the work that would result in additional cost to the State must be submitted in writing to DRES. The DRES Architect will issue written approval to proceed if the proposal is accepted. TENANT AGENCIES HAVE NO AUTHORITY TO MAKE CHANGES TO THE CONTRACT DOCUMENTS, NOR MAY THEY MAKE PAYMENTS FOR UNAUTHORIZED WORK. Proposals shall be itemized by the Lessor/Contractor as listed on the following page:

Subcontractors' prices
Other labor and materials
General Contractor's overhead and profit
State sales tax on General Contractor's subtotal
Lessor's overhead and profit (or management fee)*****
Lessor's total

***The State does not pay sales tax on the Lessor's overhead/profit/management fee.**

If the Change Order is approved, the DRES Architect will authorize it through written approval to the Lessor for the work to proceed. Upon satisfactory completion of the project, the DRES Architect will issue to the Tenant Agency an Authority to Pay for all approved costs.

1.5 ALTERNATE METHODS/SUBSTITUTIONS AND MATERIALS

The State will consider formal requests from the Lessor/Contractor for substitution of products or methods in place of those specified. In general, the contract documents describe minimum standards of construction. Construction methods or materials other than those mentioned herein may be acceptable if, in DRES's opinion, they provide equal or better quality, appearance and function.

Lessor/Contractor will provide a written statement to DRES that she/he has investigated the proposed product and method and determined that it is equal or superior in all respects to that specified. Submit to DRES three (3) copies of manufacturer's literature indicating product description, performance and test data, reference standards and samples (if requested). Provide complete, detailed description of proposed alternate construction methods. Provide a minimum of ten (10) working days for all substitutions to be reviewed for approval by DRES Architect. Approval of the proposed substitution must be in writing from the DRES Architect.

Contractor to coordinate installation of accepted substitution into work, making such changes as may be required for work to be complete in all respects. Contractor is responsible for coordinating all work resulting from substitutions and is not relieved of any responsibilities for the project under the contract.

1.6 CODE COMPLIANCE AND WORK QUALITY

If access, fire, life-safety, health hazards, or structural deficiencies are detected either before or after occupancy, they shall be corrected by the Lessor at his sole cost and expense. All project work to be completed in accordance with sound engineering practices, good trade workmanship, and utilizing new materials, clean and free from blemishes. Lessor/Contractor is responsible for all new construction meeting applicable code requirements.

1.6.1 PERMITS

Lessor/Contractor to provide and pay for all permits, fees, city and/or county requirements as required for completion of the project. Permit to include furniture partition plan, if available. Provide copies of the building permit and the certificate of occupancy to the DRES Architect.

1.7 ENVIRONMENTAL CONTROLS

To prevent and/or inhibit the degradation of indoor air quality in occupied portions of State buildings during renovation projects, the following shall be observed:

A. Renovation projects shall be scheduled to occur during favorable weather seasons and/or conditions, whenever possible.
   (1) If the project must occur during periods of inclement weather, work to be performed shall only be scheduled during the Tenant Agency's non-operating or "off" hours, i.e., weekends and evenings, or as scheduled with Tenant Agency.
   (2) The size of the area in which renovation is to occur and the scope of the project may necessitate the temporary relocation of the tenants during the construction period. This will be mutually agreed upon and arranged by DRES staff and the Tenant Agency.

B. To prevent construction dust and fumes from infiltrating the building's mechanical system and thereby affecting indoor air quality, the area where renovation is to be performed shall be separated and sectioned off from the remaining space by means of an installed plastic shield or curtain which extends from ceiling to floor and which encompasses the entire area in which renovation occurs.

C. The mechanical system which serves the entire space where renovation occurs, including shielded and non-shielded areas, shall be temporarily shut down during the actual period in which renovation is performed.

Outside air shall be introduced to this space by means of auxiliary fans. Heating units shall be utilized as required.

D. Paint and adhesives shall be non-Volatile Organic Compound (V.O.C.) type products. Building products containing formaldehyde or other VOC's must be flushed with outside air a minimum of 30 days prior to building occupancy. (See also Section 09900, 1.2)

1.8 FINAL CLEANING OF FACILITY

Prior to the DRES Architect's punchlist inspection, perform the following cleaning services throughout the leased facility and in areas directly serving the facility. All finishes are to be cleaned according to manufacturer's recommendations. Maintain the facility in a properly cleaned condition until commencement of rent or tenants begin their move-in process, whichever occurs first, except for items specifically noted in the DRES Architect's punchlist letter.

A. Clean and sweep all parking areas, driveways, and sidewalks. Remove all construction debris and equipment.
B. Wash all interior and exterior glazing; clean window and relight frames of all debris.
C. Repair, patch, touch up, and/or replace marred surfaces so as to restore to a like-new condition. Provide touch-up painting of all walls, corners, columns, soffits, and other paintable surfaces so as to achieve a blemish-free condition.
D. Vacuum, prepare and clean all finished floor materials and surfaces per manufacturer's recommendations.
E. Remove grease, dust, dirt, stains, manufacturer's labels, fingerprints, etc. from sight-exposed surfaces.
F. Provide filtration during construction at return air intake grilles. Clean all HVAC supply and return air diffusers and grilles, ducts, blowers, coils, fixtures, equipment and piping. Replace disposable air filters and clean permanent filters.
G. Flush water systems and provide letter of certification that domestic water lines are clean and have been disinfected.

SECTION 01060 - REGULATORY REQUIREMENTS

1.1 PREVAILING WAGES

Lessor agrees to pay the prevailing rate of wage to all workers, laborers, or mechanics employed in the performance of any part of this agreement unless specifically exempted by L&I. Lessor agrees to comply with the provisions of RCW 39.12 when required to do so under RCW 39.04.260 and the rules and regulations of the Department of Labor and Industries. The Department of Labor & Industries makes all determinations regarding the applicability of Prevailing Wage.

1.2 LIFE CYCLE COST ANALYSIS

RCW 39.35 and 39.35B require a Life Cycle Cost Analysis as part of renovation or construction of publicly owned or leased buildings having 25,000 square feet or more of usable space. Summarize the total costs of the facility, including initial costs, energy costs, and maintenance costs over its anticipated life span. Refer to the General Administration Division of Engineering & Architecture Services' publication: Energy Life Cycle Cost Analysis, Guidelines for Public Agencies for info and format.

The Life Cycle Cost Analysis shall be completed by the Lessor and submitted to DRES prior to completion of the preliminary drawing phase, and shall be used to help select building systems that will both conserve energy and reduce operating costs. RCW 39.35 requires that as part of the analysis, systems are detailed sufficiently to compare energy consumption. Where appropriate, consider the use of heat exchangers.

SECTION 01200 - PROJECT MEETINGS

1.1 General Communications

Omissions and discrepancies between drawings, specifications, site conditions, and code requirements shall be brought to the attention of DRES. The DRES Architect will clarify the intent of the drawings and program requirements and assist in resolving conflicting issues. All instructions to the Lessor/Contractor will be given by the DRES Architect. DRES will not be responsible for verbal instructions. Any verbal instructions must be confirmed in writing. Minor clarification may be confirmed in meeting minutes or site visit reports. See Section 01010, 1.4.

1.2 Pre-Construction Meeting (Agenda):

A. Establishes construction schedule
B. Establishes progress meeting schedule
C. Schedules DRES Architect inspections
D. Establishes line of communication/authority
E. Coordinates state vendors and general contractor
F. Establishes type of furniture partitions
G. Establishes Change Order process
H. Establishes submittals process
I. Establishes as-built record keeping
J. Establishes payment schedule

1.3 Progress Meeting/Inspection

A. Lessor shall contact the DRES Architect one (1) week before covering (plumbing, framing, electrical, etc.) to allow for inspection of critical phases of construction
B. Inform the DRES Architect of deviations from schedule, dimensions, etc.

1.4 Final Inspection

A. Lessor shall contact the DRES Architect and schedule punchlist inspection
B. Project must have Certificate of Occupancy and DRES Architect approval for occupancy before Tenant Agency can move in
C. Complete punchlist items within thirty (30) days

1.5 Close-Out (See Section 01700)

A. Lessor shall send bills, invoices, and certified Prevailing Wage documentation to the DRES Architect prior to issuance of an Authority To Pay to the Tenant Agency
B. DRES Architect shall receive all required certificates, including the Certificate of Occupancy or final signed-off building permit, HVAC certificate, certified Affidavits of Wages Paid forms, applicable warranties, and Operations and Maintenance manuals
C. DRES Architect shall inform the DRES Lease Agent of project completion

SECTION 01300 - SUBMITTALS

1.1 PRODUCT SUBMITTALS

Submit all material, color and finish samples to DRES Architect for approval and selection. Allow ten (10) working days for submittals to be reviewed by DRES Architect. Provide a minimum of two (2) documents for review. Submit together all colors and materials that occur in the same room or rooms. Provide full range of manufacturer's color samples for each material color selection. Provide shop drawings where appropriate. Coordinate with Agency's pre-approved color board, if applicable.

1.2 MATERIAL SAFETY DATA SHEETS (M.S.D.S.)

Provide Material Safety Data Sheets for the following building materials if utilized in preparation of the leased space: insulation, PVA sealer, gypsum wallboard, paint, ceiling tile, carpet, base, carpet/base adhesive, casework.

SECTION 01500 - CONSTRUCTION FACILITIES

1.1 TEMPORARY FACILITIES

Lessor shall provide and pay for all temporary construction facilities and utilities. Contractor/ superintendent shall be available by pager, cellular phone and/or project site phone during normal business hours. Provide telephone number(s) to the DRES Architect.

SECTION 01700 - PROJECT CLOSE-OUT

1.1 OPERATING INSTRUCTIONS/MAINTENANCE MANUALS

Provide simplified operating instructions and emergency instructions. Provide training for HVAC controls and other building equipment/hardware to designated building manager and limited Agency staff. Information contained in manuals shall include warranty/guarantee, operating instructions, manufacturer's recommendations for care, cleaning and maintenance, including type and frequency of cleaning and maintenance. Provide reduced scale zone map for HVAC system and controls. Provide names and phone numbers of repair/maintenance contacts. Data in manuals shall be neat, clean, and readable copies. See Sections 15500 and 16000 for additional requirements.

1.2 WARRANTIES AND CERTIFICATIONS

The Lessor/Contractor shall warrant to the State that all project work, materials and installation will be new and be of good quality, free from defects and in conformance with the intent of these contract documents. The Lessor/Contractor shall also warrant that systems and materials meet all State indoor air quality standards and specifications. All work not conforming to the intent of these minimum quality standards will be considered defective.

Submit written certifications to the DRES Architect on the respective subcontractor’s or consultant’s letterhead, addressing the following issues:

A. The HVAC system has been designed, installed, and is certified to be functioning as designed (specific certification requirements to be included are described in section 15500, 1.1 of the Leased Space Requirements.)

B. The electrical system (receptacles, equipment connections, etc.) has been installed in compliance with the Leased Space Requirements (i.e. dedicated-power receptacles and isolated-ground receptacles are configured to function as intended by their design.)

C. The lighting levels stipulated in Section 16520 of the Leased Space Requirements are being achieved according to documented light level readings certified by the lighting designer.

D. The carpet has been provided according to the materials and installation procedures delineated in Section 09680 of the Leased Space Requirements, including documentation (such as manufacturer's invoices or bills of lading) submitted to the DRES Architect demonstrating that the product supplied is the same as the product approved by the Project Team.

1.3 PROJECT RECORD/AS-BUILT DRAWINGS

As the job progresses, the Contractor, along with mechanical and electrical subcontractors for their respective work, shall keep an accurately marked-up set of Contract Documents showing all changes and deviations from original drawings at the project site. Upon completion of project, the Contractor(s) shall transfer all changes and deviations indicated on their project sets to a permanent as-built drawing set, and submit those drawings on either reproducible medium or on a computer disk in a format compatible with the latest release (version) of AutoCAD (preferred method). All changes and information shall be neatly and clearly drawn and described with technical accuracy. Contractor shall provide two (2) sets of as-built drawings to the DRES Architect within thirty (30) days of project completion.

1.4 TENANT OCCUPANCY AUTHORIZATION

Upon the DRES Architect's determination of substantial completion, he/she will authorize the Tenant Agency to occupy the facility. The Tenant Agency will be issued an Authority to Pay for all authorized additional tenant improvement construction costs upon the DRES Architect's determination that the Lessor/Contractor has satisfactorily resolved all punchlist items.

End of Division 1

DIVISION 2 SITEWORK

SECTION 02000 - SITEWORK

1.1 SUMMARY OF WORK

Comply with the provisions of the drawings, specifications, and lease documents for extent of sitework. Provide a screened enclosure for solid waste handling and equipment as specified in Section 11170.

SECTION 02200 - EARTHWORK

1.1 SITE CONDITIONS

The Lessor is responsible for investigation and determination of all existing site conditions and requirements. The building site has not been surveyed or tested by the State as to soil character and drainage conditions. Provide right-of-way construction and site drainage as required by local building officials. All utilities required for this project to be underground and meet all local regulations. Existing utilities above-ground may be retained.

1.2 SUBMITTALS

Submit drawings showing locations of all site utilities and easements to the DRES Architect.

SECTION 02500 - PAVING AND SURFACING

1.1 PAVING

Provide asphalt paving, concrete curbs, cuts and sidewalks. (See Section 03300) Asphalt paving shall be of sufficient thickness to support vehicular and truck traffic without permanent deformations and deterioration. Provide complete weed kill under new asphalt paving as required by the site conditions and as required in landscaping areas.

Place catch basins and slope asphalt paving to prevent standing water and keep draining water away from pedestrian crosswalks. Provide approximately 2% - 3% cross slope to storm water catch basins. Curb radius to be minimum of 12' at parking intersections, unless otherwise required by local ordinances. Provide 2% slope (1:48 maximum) at accessible stalls.

1.2 PARKING LAYOUT AND STRIPING

Provide parking stall striping. Standard parking stalls to be 9' x 20' minimum unless otherwise allowed by local ordinance and authorized by DRES Architect. Striping to be 4" wide, white. Provide stall identification as required by Tenant Agency. Paint international symbol on accessible stalls and provide required accessible sign at head of stall(s). (See Section 10400).

SECTION 02900 - LANDSCAPING

1.1 PLANTINGS

Provide landscaping as required by local ordinance, including trees, shrubs, ground cover and grass in all locations on the site intended or allowed for such purpose. Show existing trees where they exist in landscaping areas and protect during construction. Plans to be reviewed by DRES Architect. (See A4.5)

1.2 IRRIGATION

Provide underground irrigation system to all landscaped areas. Provide complete time clock control and meter separate from main water meter. Provide automatic drainage system to protect system against freezing, including air blowout connections.

End of Division 2

DIVISION 3 CONCRETE

SECTION 03000 - CONCRETE

1.1 SUMMARY OF WORK

Extent of concrete work as indicated on drawings and in the specifications. Comply also with Division 1.

SECTION 03300 - CONCRETE

1.1 CONCRETE WORK

Provide concrete sidewalks, curbs and cuts as indicated on drawings and in Section 02500. Concrete shall be a minimum of a 5-1/2 sack mix, with a minimum compressive strength of 3,000 psi. New sidewalks shall be screeded, floated, and steel-troweled with a light broom finish, or to match adjacent work.

Provide concrete foundations, walls, floors and topping as required. Cut and patch floors and walls as required to implement design and meet project requirements. Saw-cut as required. Reinforce new openings as structurally required. (See Part A5.1 and A5.2)

1.2 PARKING BUMPERS

Provide precast concrete, steel dowel-anchored, wheel bumpers or curbs for parking stalls next to building walkways. Position 3'-0" from curbing. Provide concrete bumpers in other areas when shown on drawings. (NOTE: in locations of high annual snowfall, steel dowels may be omitted, except where bumpers are required to protect structures or other hazards.)

Integral sidewalk/wheel stop/curbs are allowed as long as the remaining clear width of sidewalk meets or exceeds the minimum width for access as required by code. In such instances, allow three feet (3'-0") for vehicle bumper overhang.

End of Division 3

DIVISION 4 MASONRY

SECTION 04000 - MASONRY

1.1 SUMMARY OF WORK

Extent of the masonry work as indicated on the drawings and in the specifications. Comply also with Division 1.

1.2 NEW OPENINGS AT EXISTING MASONRY WALLS

Saw-cut openings as required. Reinforce heads and/or jambs as required by Lessor's structural engineer.

End of Division 4

DIVISION 5 METALS

SECTION 05000 - METALS

1.1 SUMMARY OF THE WORK

Extent of the metal work as indicated on the drawings, in the specifications, and as required for a complete project. Comply with Division 1.

Anchor materials solidly in manner directed and in accordance with highest industry standards. Provide blocking as required for products specified elsewhere. Provide adequate gauge steel framing for project height and loading. **See Section 09250** for wallboard and metal framing.

End of Division 5

DIVISION 6 WOOD & PLASTICS

SECTION 06000 - WOOD AND PLASTICS

1.1 SUMMARY OF THE WORK

Extent of the wood and plastic work as indicated on the drawings and in the specifications. Comply with Division 1.

SECTION 06100 - ROUGH CARPENTRY

1.1 DESCRIPTION OF THE WORK

Provide carpentry work, all materials and items required for complete installation of products including anchors, fasteners and other necessary accessories. Anchor materials solidly in manner directed and in accordance with highest industry standards. Provide blocking as required for products specified elsewhere. **See Section 09250** for wallboard and wood framing. (See Part A5.1 through A5.5)

SECTION 06200 - FINISH CARPENTRY

1.1 DESCRIPTION OF THE WORK

Provide finish carpentry work as shown on the drawings and in the specifications. Provide all materials and items required for complete installation of products, including hardware, anchors, fasteners, and other necessary accessories. Finish wood with stain and minimum two coats semi-gloss finish. Stain color as selected by DRES Architect.

1.2 ADJUSTABLE SHELVING

Provide 12" deep x 3/4" thick self-edged overlay plywood, or melamine-surfaced high-density particle board with vinyl "T-molding" shelves capable of supporting 25 pounds per lineal foot. Provide five (5) shelves, or as noted, adjustable in 1" increments with metal standards and adjustable brackets, securely anchored, maximum 32" o.c. into studs. See Section 09250 for blocking and bracing requirements.

1.3 TRIM AT CLOSINGS

Provide soundproof 2" wide wood or metal closing trim at partitions meeting window mullions or window glazing. Match depth and type of window sill material and finish partition ends. Styrofoam closures are not acceptable. Submit proposed method to DRES Architect for review.

1.4 EQUIPMENT BOARDS

Provide 3/4" fire-resistant plywood on all walls of voice/data/equipment rooms. Mount bottom no higher than twenty inches (20") above floor, top no lower than eighty-four inches (84") above floor. Alternate design may be indicated on DRES drawing or specified by DRES Architect. Mount on wallboard, masonry, or concrete. Existing plywood may remain if treated with flame-retardant paint.

SECTION 06400 - CASEWORK

1.1 GENERAL

Furnish and install casework at the locations shown on the drawings and as specified, complete with hardware. Provide **shop drawings** for service/reception counter and/or other specialty casework to DRES Architect for review and approval. Plastic laminate and stain colors as selected by DRES Architect.

1.2 COFFEE BAR/CABINETS

See plan for sink location and special features. Design shall provide for accessibility per local building codes. Provide 36" high lower cabinet and 36" high upper cabinet, mounted 24" above counter. Four inch (4") high rubber base in 4" x 4" toe space to match room base. Plastic laminate countertop, self-edged, full-width 24" high back and side splashes. Provide 3/4" hardwood veneer (except mahogany) plywood or plastic laminate, with matching edges for all exposed-to-view surfaces. Provide bronze wire pulls, adjustable magnetic catches and bronze adjustable self-closing hinges; 5-pin locks on one (1) door (provide divider) and one (1) drawer at each coffee bar, key alike.

Provide 24" maximum face drawer width and face door width. Provide durable drawer construction, 3/4" face, 1/2" sides, 1/4" bottom with Grant #329 guides or equal. Provide 3/4" melamine veneer or stained 3/4" hardwood veneer self-edged interior shelving, adjustable in 1" increments and removable.

Stain all wood surfaces. Finish exposed wood surfaces with two (2) coats semi-gloss finish. Secure to the wall with screws. See Part A5.7 and Sections 15440 and 15450 for sink and instant hot water dispenser requirements. Other cabinets shall be of similar construction and meet required dimensions and clearances.

1.3 MODULAR SHELVING UNITS

Provide 12" deep (or as indicated on plans), 3/4" thick construction. Self-edged plastic laminate plywood or melamine-surfaced high-density particle board with vinyl "T-molding" in full seven feet (7') height by three feet (3') maximum width modular units. Shelves capable of supporting 25 pounds per lineal foot. Provide five (5) shelves, adjustable in 1" increments with metal adjustable end brackets. Anchor units securely to wall framing with screws. See Section 09250 for blocking and bracing requirements.

SECTION 06600 - PLASTIC LAMINATE

1.1 DESCRIPTION OF THE WORK

Provide 1/16" thick, high-pressure, plastic laminate where shown on the drawings or as specified. Locations include countertops, edges, splashes, window sills, cabinet faces, wainscots, toilet partitions and/or doors. See Sections 09000 and 10150 for related requirements.

Provide quality materials such as Wilsonart, Formica, Nevamar, or as approved by the DRES Architect. Color: As selected by the DRES Architect.

End of Division 6

DIVISION 7 THERMAL & MOISTURE PROTECTION

SECTION 07000 - GENERAL

1.1 SUMMARY OF THE WORK

Extent of the thermal and moisture protection as indicated on the drawings and in the specifications. Comply with requirements of Division 1.

Provide as required for a complete project. Do not use non-compatible materials. Avoid synthetic products which are known to shrink, de-gas, or otherwise decompose before the useful life of the construction or assembly. Work includes flashing, sheet metal, sealants, thermal and sound insulation.

Provide flashing and sheet metal work as shown and specified including necessary accessories and fasteners for anchorage as required by the conditions of installation.

Provide all sealant work, unless specified elsewhere. Provide all necessary items required for complete sealant installation.

SECTION 07200 - INSULATION

1.1 DESCRIPTION OF THE WORK

Provide insulation work as shown and specified. Provide materials and items required for complete installation including fasteners, sealers and other necessary accessories. Provide roof, wall, floor, etc, thermal insulation as required by the Washington State Energy Code. Attach insulation to permanent structure. Material laid on ceiling tile to achieve thermal insulation value is not acceptable.

1.2 SOUND INSULATION

Provide full coverage rock wool, or Fiberglas insulation by Schuller or equal, sound attenuation batts in walls enclosing all restrooms, stairs, elevator, elevator machine rooms, voice/data/equipment rooms, conference rooms, training rooms, mechanical shafts, rain leaders, plumbing waste lines, and any other areas housing noise-producing equipment. Provide sound insulation in other locations, such as private offices or as noted in plans as an additional Tenant Improvement. The assembly rating of such systems shall achieve and maintain an STC value of 45 minimum, or as noted on drawings. Submit proposed sound wall design and technical data to the DRES Architect for review. (See Part A5.3)

SECTION 07500 - ROOFING

1.1 NEW CONSTRUCTION AND REPLACEMENT ROOFING

Provide complete assembly meeting all manufacturer's requirements for minimum 20-year guarantee. Use compatible materials. Design with positive slope and no standing water. Control run-off with adequately sized rainwater leaders and storm water system. Protect all openings against water entry with curbs, minimum of 6" high.

1.2 EXISTING ROOFING

Provide roof assemblies in good repair, free of leaks and prolonged standing water. Control runoff away from sidewalks and entries. Protect all openings against water entry with curbs, minimum of 6" high.

End of Division 7

DIVISION 8 DOORS & WINDOWS

SECTION 08000 - DOORS AND WINDOWS

1.1 SUMMARY OF THE WORK AND QUALITY ASSURANCE

Provide exterior glazing amounting to a minimum of five percent (5%) of the floor area. Provide materials and items indicated on the drawings and in the specifications as required for complete installation of products, including anchors, fasteners and other necessary accessories. Provide heavy-duty commercial-grade products. All doors and installations to comply with building, accessibility, and fire codes. Assemblies to meet fire ratings. Replace all warped doors. Comply with Division 1.

1.2 TYPICAL DOOR SCHEDULE

A door schedule will be included either on the drawings or in an addendum to these specifications for each project. If no project door and hardware schedule is provided, the schedule on the next page applies. Each letter or number designation within each category indicates a specific configuration assembly for the referenced door. The designation is a 3-symbol format, with the first letter denoting the door type, the middle number referring to the type of locking operation, and the last letter indicating the hardware grouping.

Example: A "C4M" notation would indicate a solid core wood door, with a classroom lock, and hardware consisting of ball-bearing hinges, kickplates, and a 6" x 36" relight.

Basic Hardware

All doors shall receive not less than 1-1/2 pair hinges, 1 stop, and 3 silencers (except if smoke seal or weather-stripping provided), in addition to the HARDWARE GROUP requirements listed below:

Door Type	**Lock Type**	**Hardware Group**
A. Storefront	1. Automatic opener--Provide after-hours locking as required. Door opens with infrared sensors or electric push pads. Manual emergency egress.	A. Existing Hardware
B. Hollow Metal	2. Card key--Inside always unlocked, outside entry by card unless unlocked from outside by key	B. Basic Hardware
C. Wood	3. Cypher--Inside always unlocked, outside combination keypad	C. Closer
D. Acoustic operable panels	4. Classroom--Inside always unlocked, outside entry by key unless unlocked from outside by key	D. Closer, Kickplates
E. Acoustic accordion partition	5. Passage latchset--Both sides always unlocked	E. Closer, Ball-bearing hinges
F. Accordion partition	6. Privacy--inside push-button: outside entry by special key	F. Closer, Relight
	7. Vestibule--Inside always unlocked; outside entry by key, unless unlocked from inside	G. Closer, Kickplates, Ball-bearing hinges
H. Wood bi-fold	8. Storeroom--Inside always unlocked; outside entry by key only	H. Closer, Kickplates, Relight
J. Roll-up security gate	9. Push/pull plates (6"x20" plate with 1" diameter x 10" long pullbar)	I. Closer, Kickplates, Relight, Ball-bearing hinges
K. Metal overhead sectional door		J. Closer, Ball-bearing hinges, Relight
L. Roll-up fire-rated overhead assembly		K. Kickplates
		L. Kickplates, Ball-bearing hinges
		M. Kickplates, Ball-bearing hinges, Relight
		N. Kickplates, Relight
		P. Ball-bearing hinges
		Q. Relight, Ball-bearing hinges
		R. Relight
		S. Special hardware
		T. Sound gasket weather-stripping

SECTION 08100 - METAL DOORS, FRAMES AND RELIGHTS

1.1 SIZE AND CONSTRUCTION

3'-0" minimum width. 7'-0" minimum height exterior. 7'-0" minimum height interior. 1-3/4" thick solid core, 18 gauge minimum. Submit door manufacturer's brochure for review and approval by the DRES Architect. Exterior doors shall be galvanized, solid core, insulated, weather-stripped, and reinforced for hardware. The door shall be sealed against water penetration.

1.2 FRAMES

Interior frames to be hollow metal, 16 gauge minimum, welded or knock-down frames, Lessor's choice. Exterior frames to be galvanized metal. All metal frames shall be compatible for weather-stripping, and reinforced for hardware.

1.3 DOOR RELIGHTS

Bottom of door relights at 40" maximum above finished floor. Sizes and locations as noted under "Door Schedule".

1.4 INSTALLATION

Coordinate all door installation, magnetic hold-opens and electric locking requirements with the door frame supplier and the building security and access systems vendors.

SECTION 08200 - WOOD DOORS, FRAMES AND RELIGHTS

1.1 SIZE AND CONSTRUCTION

3'-0" minimum width. 7'-0" minimum height interior. All wood doors to be hardwood veneer (except mahogany). 1-3/4" thick solid core. Submit finish samples for review and selection by the DRES Architect.

1.2 FRAMES

Interior frames to be softwood, hardwood or hollow metal (See Section 08100), Lessor's choice.

1.3 WALL RELIGHTS

Frames to match door frames, all heads same as door head height, unless specifically noted otherwise; sizes as shown on the drawings. Provide fire-rated assemblies where required by code. Provide safety glazing elsewhere, unless otherwise noted.

1.4 DOOR RELIGHTS

Bottom of door relights no more than 40" above finished floor. Size 24" x 36" unless noted otherwise; verify code limitations for glazing.

1.5 INSTALLATION

Coordinate all door installation, magnetic hold-opens and electric locking requirements with door frame supplier and the building security and access systems vendors.

SECTION 08300 - ACOUSTIC PARTITIONS AND MISCELLANEOUS DOORS

1.1 DESCRIPTION OF THE WORK

Provide and install doors to meet building, accessibility and fire codes. Provide structural enhancements as required or as recommended by door manufacturer to allow proper operation. Locations as shown on the drawings.

1.2 DOOR TYPES AND CONSTRUCTION

1.2.1 ACOUSTIC OPERABLE PANEL WALLS

Floor to ceiling and wall to wall; support to prevent sag. Provide integral access door when noted on plan. Provide STC 44 minimum. Sound attenuation integrity shall extend above ceiling as required to maintain the minimum STC rating from room to room. Submit proposed construction details to DRES Architect for approval. Modernfold "Acousti-Seal," "Spacesetter," or Panelfold "Series 4800," or approved equal. Color as selected by DRES Architect. Submit manufacturer's literature for review and approval by DRES Architect.

1.2.2 ACOUSTIC ACCORDION PARTITIONS

Floor to ceiling and wall to wall; support to prevent sag. Provide STC 39 minimum. Sound attenuation integrity shall extend above ceiling as required to maintain the minimum STC rating from room to room. Modernfold "Audio-Wall," or approved equal. Color as selected by DRES Architect. Submit proposed construction details and manufacturer's literature for review by DRES Architect.

1.2.3 ACCORDION DOORS

Floor to ceiling and wall to wall; support to prevent sag. Modernfold or equal. Color as selected by DRES Architect. Submit manufacturer's literature for review and approval by DRES Architect.

1.2.4 ROLL-UP SECURITY GATES

Provide electrically-operated gates, whose operation is controlled by a switch located on the non-public side of the counter or partition. Gate to include an override mechanism to allow full manual operation in case of power outage. Locate motor, spindle, and other operating mechanisms above suspended ceiling. If the mechanism is mounted below the ceiling, Lessor shall provide a GWB/painted enclosure to match adjacent walls. Submit proposed system to DRES Architect for approval.

SECTION 08400 - ALUMINUM ENTRANCES AND STOREFRONTS

1.1 DESCRIPTION OF THE WORK

Extent of aluminum entrances and storefront types is indicated on the drawings and schedules, and may include exterior entrance doors, vestibule doors, frames for exterior vestibule entrances, and relights. Provide new aluminum storefronts and all appropriate accessories constituting a complete system. Assembly construction to be compatible with power operators. Where applicable, modify existing storefront doors and frames as may be required to accommodate specific tenant requirements for security and access systems.

1.2 SIZE, COMPONENTS AND CONSTRUCTION

Frames

Provide dark bronze aluminum entrance and storefront assemblies or match to similar material on building exterior.

Doors

Doors shall be a minimum of 3'-0" wide and 7'-0" high, head and jamb stiles 5" wide and bottom stile 12" deep with insulated tempered glass at exterior locations.

Glazing and Frames

Frames to match door frames, all heads same as door head height, sizes as shown on the drawings. Provide insulated tempered glass at exterior locations.

Hardware
Provide manufacturer's standard hardware. Also see Section 08700 for general hardware requirements. Provide hardware compatible with power operators. Provide overhead concealed closer, 1-1/2 pair 4-1/2" ball-bearing hinges, push bars, pulls, weather-stripped, vestibule lever lock, flat threshold level with interior and exterior floor materials.

Controls
Provide infrared sensors or push pad controls where shown on drawings.

Signage
Verbiage as directed by Tenant Agency, location either on the glazing nearest the main entry door, on the wall nearest the main entry, or as otherwise approved by the Tenant Agency (See Section 10400).

1.3 MANUFACTURERS
Kawneer Company, Inc, or approved equal.
Horton series #2100 sliding door, or approved equal.

SECTION 08500 - WINDOWS AND CURTAIN WALLS

1.1 DESCRIPTION OF WORK AND PRODUCT QUALITY
Provide insulated glazing. All construction, including sealants, flashing, siding, window assembly, and installation to resist air and moisture leaks and interior condensation. For new construction, provide thermally broken commercial frames. Interior window sills to be finished with plastic laminate or other approved water resistant material.

SECTION 08700 - HARDWARE AND SPECIALTIES

1.1 DESCRIPTION OF THE WORK AND PRODUCT QUALITY
Provide materials and items as required for complete installation of products, including fasteners, anchors and other necessary accessories. Provide locksets and other hardware per schedule. Additionally, provide closers and smoke seals where required by code. Provide ball-bearing hinges at all self-closing doors.

Each kind of hardware (locksets, closers, hinges, etc.) shall be obtained solely from one (1) manufacturer. Provide heavy-duty commercial-grade locks, hinges, closers, door stops, silencers, and miscellaneous hardware.

1.2 SUBMITTALS
Manufacturer's Data: Submit product specifications and literature for review by the DRES Architect.

1.3 KEYING
Key all locks for operation and security; coordinate master keying with Tenant Agency. Provide construction keying to master system. Provide permanent keying by hardware supplier to Tenant Agency. Hardware supplier to provide construction keys to contractor and four (4) sets of permanent keys to Tenant Agency.

1.4 HARDWARE MANUFACTURERS AND SPECIAL REQUIREMENTS
Provide lockset or latchset, hinges, door stop, silencers (or smoke seal or weather-stripping) and miscellaneous hardware at each door.

Locksets and Latchsets
All locks and passages to be equipped with **lever** hardware, except at mechanical, electrical, telephone, and janitor's rooms, where knurled knobs are acceptable. Heavy-duty commercial cylindrical type; Corbin heavy-duty commercial, Schlage Series D, or equal.

Hinges
McKinney or equal. Provide ball-bearing hinges on all multi-stall restrooms, stairs, entrances, exits, and where called for in the door schedule.

Closers
LCN or equal. Closers to be adjusted to a maximum opening force of five pounds (5 lb.) at interior doors and eight and one-half pounds (8-1/2 lb.) at exterior doors. Spring hinge used as closer is not acceptable.

Silencers
Provide silencers on each door except where smoke seal or weather-stripping is installed.

Stops
Overhead stop to be concealed, Glynn Johnson 320/330 series or equal. Wall stop to be Glynn Johnson WB50 or equal. Floor stops unacceptable. Provide solid blocking for all wall stops. Closer used as stop is not acceptable.

Kickplates
Kickplates on wood doors to be 1/8" clear plastic, 34" X 12" (unless noted otherwise), or as approved by DRES Architect. Kickplates on both sides of door typical. Kickplates to be provided on all restroom, stair, entrance and exit/pathway doors and where called for in the door schedule.

Weather-stripping and Thresholds
All exterior doors to be weather-stripped with continuous vinyl at head and jambs, and across door bottom. All public entrances and accessible routes to be provided with a beveled, one-half inch (1/2") maximum rise threshold.

1.6 ACCESS SYSTEMS

Cypher Locks
Cypher locks shall consist of a minimum 5-number push-button code access system. Lock shall have changeable code capacity and be capable of remaining continuously unlocked (at tenant's discretion) during business hours.

Automatic Opener Assembly
When noted in the door schedule, provide an automatic operator that is actuated by a push button plate for barrier-free accessibility, and manually operable for other pedestrian traffic. Alternately, infrared sensors may be provided if appropriate for special design and Tenant Agency. Provide a complete system for full operation, including field-adjustable variable time delay, opening and closing speed, control switching for security access system and locking, all appropriate connections, and complying with all applicable provisions of WAC 51-40.

Card Key Systems
When noted in the door schedule, provide a fully functional card reader system providing access security control, complete with all components including, but not limited to, panels, door strikes, locks, buttons, readers, contacts, connections, switching, control mechanisms, and operating cards. Verify the desired operational parameters with the DRES Architect and interface all disciplines as appropriate. Submit full specifications and manufacturer's literature of proposed system to DRES Architect for approval.

1.7 FINISH

All hardware to have matching finishes. Match new hardware finish to remaining existing hardware. For new construction, unless noted otherwise, provide either semi-gloss bronze (US-10) or semi-gloss chrome (US-26d), or as approved by the DRES Architect.

SECTION 08800 - GLAZING

1.1 DESCRIPTION OF WORK

Provide glazing as shown on the drawings and in the specifications. All exterior glazing to be insulated. All new glazing to meet current Energy Code (WAC 51-11) for integral shading and "U"-values.

1.2 PRODUCTS

Glazing products may include several of the following: reflective film, security film, insulating glass, laminated glass, one-way view glass, tempered clear glass, wired glass, mirrors, rock-proof security glazing.

End of Division 8

DIVISION 9 FINISHES

SECTION 09000 - FINISHES

1.1 SUMMARY OF THE WORK

All interior spaces to be finished, unless noted otherwise. Finishes are as scheduled below, unless noted otherwise on drawing or addendum. Comply with Division 1.

1.2 SUBMITTALS

Manufacturer's Data: Submit complete product literature and full range of color and finish samples for each material considered for review and selection by DRES Architect. Submit together all colors and materials that occur in the same room or rooms. Allow ten (10) working days for submittals to be reviewed by DRES Architect.

1.3 FINISH SCHEDULE

1.3.1 FLOORS AND BASE

Offices (and spaces not otherwise indicated)
Carpet and 4" rubber base (See Sections 09680 and 09650)

Restrooms, Shower Rooms
Ceramic tile with slip-resistant finish (See Section 09300). Sheet vinyl optional for leases not exceeding 10,000 square feet (See Section 09650). All flooring material shall have matching cove base extending upward onto the adjacent wall at least five inches (5").

Coffee Bars, Break Rooms, Lunch Rooms
Vinyl composition tile or sheet vinyl: Install length of coffee bar and 24" out, unless shown otherwise on drawings (See Section 09650). Provide 4" rubber base (See Section 09650).

Mechanical, Electrical, Voice/Data/Equipment, Copy, and Janitor Rooms
Vinyl composition tile and 4" rubber base (See Section 09650).

Vestibules and Entries
Tire tile, or as indicated, with 4" rubber base (See Section 09650).

1.3.2 WALLS

Offices (and spaces not otherwise indicated)
Gypsum wallboard and orange peel texture semi-gloss enamel paint (See Sections 09250 and 09900).

Drinking Fountains
Plastic laminate on adjacent walls to 48" high above finished floors, with continuous metal or matching plastic edges. Extend 18" minimum each side of fountain.

Restrooms, Shower Rooms
Water-resistant gypsum wallboard and epoxy paint, with ceramic tile wainscot to 72” (minimum) on all walls. Ceramic tile wainscots to be finished with bullnosed edge material at transition to GWB materials. See Sections 09250, 09300, and 09900.

Option for leases under 10,000 square feet: Wainscot may be minimum 48" high, plastic laminate, all joints and edges finished with metal trim. Color as selected by DRES Architect and Tenant Agency. Provide on all walls in restrooms.

Janitor Rooms and Service Sinks
Gypsum wallboard, with plastic laminate wainscot at service sink. See Sections 09250 and 06600.

Shower stalls
Ceramic tile with cementitious tile-backer board, Wonderboard or equal, unless prefabricated fiberglass enclosure has been approved by DRES Architect. Design to meet accessibility requirements, including maximum 1/2" threshold.

1.3.3 CEILINGS
Office ceiling height 9'-0" minimum in all areas unless otherwise indicated. Acoustical tile suspended ceiling system (See Section 09500). Provide 10'-0" minimum ceiling height for large open areas where the minimum room width exceeds 29'.

Restrooms to be gypsum wallboard with epoxy paint. Mechanical, voice/data/equipment, janitor rooms and electrical room ceilings to be gypsum wallboard or suspended acoustical ceiling, at Lessor's option. Ceiling heights shall be 7'-6" minimum with 8'-0" preferred. (See Sections 09250, 09500 and 09900)

SECTION 09250 - GYPSUM BOARD AND WALL FRAMING

1.1 SUMMARY
Extent of gypsum board construction required is indicated on the drawings and schedule. This section describes the following types of gypsum board construction:

Steel and wood framing to receive gypsum board (See Sections 05000 and 06100).
Thermal and sound insulation (See Section 07200).

1.2 WALLS, PARTITIONS AND HARD CEILINGS

Steel or Wood Framing and Furring
Provide studs spaced at 16" maximum on-center for restrooms and client lobbies. All other framing to be 16" or 24" maximum on-center. Install supplementary framing, blocking and bracing at terminations in the work and for support of fixtures, equipment services, heavy trim, door stops, grab bars, toilet accessories, furnishings, adjustable shelves, and similar construction considering weight or loading to meet all requirements for items supported.

Partition framing to be level; provide finished appearance where top of partition meets suspended ceiling. Minimize the gap and provide a strip of insulation between top of partition and ceiling. Exposed metal or wood trim not acceptable, except where partitions are to terminate at structural supports. Continue framing above ceiling over doors and openings. Frame around ducts penetrating walls to provide support for gypsum board. See Divisions 5 and 6.

Gypsum Wallboard
Install 5/8" thick, type X for all "dry" areas unless otherwise indicated. Install water-resistant 5/8" thick, type X for all toilet rooms, showers, and similar "wet" areas. Screw wallboard into metal studs or KD wood studs. Maintain fire-resistant rating of wall/ceiling assemblies at openings. Provide galvanized metal cornerbead and edge trim. Joints taped and spackled (two coats minimum). Match adjacent wall texture; light orange-peel texture in new construction, for interior installation.

SECTION 09300 – CERAMIC TILE

1.1 DESCRIPTION OF WORK

Provide ceramic tile for restrooms, showers, and as scheduled for floors and wainscot (72" high minimum, to ceiling for showers), for leased spaces exceeding 10,000 square feet. For leased spaces under 10,000 square feet, plastic laminate wainscot and sheet vinyl floors may be provided in lieu of ceramic tile. (See Sections 06600 and 09650) Completely seal all ceramic tile applications after installation, grouting and cleaning in accordance with the tile and grout manufacturer's recommendations.

1.2 SHOWERS

Provide cementitious tile-backer board behind all ceramic tile showers. Install with corrosion resistant fasteners. (See Sections 10810 and 09000)

1.3 SUBMITTALS

Submit product and color samples for tile and grout to DRES Architect for selection.

SECTION 09500 - ACOUSTICAL CEILING

1.1 DESCRIPTION OF WORK

Provide acoustical ceiling work as shown or specified on the drawings. Provide all items required for complete installation of products including wall moldings, anchors, accessories/fasteners, etc, required by conditions of installation.

1.2 SUBMITTALS

None required except for lease development projects, products other than specified below or requested by the DRES Architect. Existing construction will be reviewed by DRES Architect.

1.3 SUSPENSION SYSTEM

Provide rust-resistant 2' x 4' exposed grid system for lay-in acoustical tile, fire-rated where required. Installation typical in all areas except as noted. Grid to match acoustic tile background white color or as specified. Lay grid to run continuously across floor areas and above floor-to-ceiling partitions. In no case shall the grid be attached to the ductwork. Provide seismic bracing and support per governing code(s). Provide corrosion-resistant grid system for "wet" areas and laboratories. Provide fire-rated grid system where required by code or shown on drawings.

1.4 ACOUSTICAL TILE PANELS

Non-fire rated tile

24" x 48" x 3/4" minimum thickness, Ceiling Attenuation Class (CAC, formerly STC) minimum range 35 - 39, NRC minimum range .65 - .75. Tile with lower CAC and NRC values than those specified is not acceptable. Install tile in accordance with tile manufacturer's requirements, all in one direction. Provide in all areas except as otherwise indicated on the drawings or specifications. Armstrong Cortega FineTex, NRC Glacier, or equal. Provide moisture-resistant tiles in moist and exterior areas.

Fire-rated tile

24" x 48" x 3/4" minimum thickness, CAC minimum range 35 - 39, NRC minimum range .60 - .70. Tile with lower CAC and NRC values is not acceptable. Install tile in accordance with tile manufacturer's requirements, all in the same direction. Provide in all areas as required. Armstrong ML FineTex FireGuard, USG Glacier (24” x 24” x 3/4”), "F" Fissured (24" x 24" x 3/4"), or equal.

SECTION 09650 - RESILIENT FLOORING

1.1 DESCRIPTION OF WORK

Provide resilient flooring as shown and specified. Provide materials and items as required for complete installation of products, including fasteners, anchors, and other necessary accessories. Prepare substrate(s) per manufacturer's directions.

1.2 SUBMITTALS

Manufacturer's Data: Submit product literature and colors for each material used, for review and approval by DRES Architect.

1.3 FINISH CONDITION

All flooring areas to be cleaned, waxed, and finished according to manufacturer's recommendations just prior to Tenant occupancy.

1.4 VINYL COMPOSITION TILE

Vinyl composition tile, 12" x 12" x 1/8" thick, Armstrong Azrock, Tarket, or equal. Areas: coffee bars, janitor's closets, electrical, mechanical, and voice/data/equipment rooms, and where noted on the drawings. Armstrong Stepmaster or equal where slip-resistant is noted on drawings.

1.5 SHEET VINYL FLOORING

Commercial-grade, .085" thick, .050" wear surface, Armstrong Corlon or equal. Provide full backing and 5" cove for base in restrooms and shower rooms. (See Section 09000, 1.3.1)

1.6 TIRE TILE

12" x 12" x 3/8" thick, parquet pattern, adhesive and installation per manufacturer's directions. American Floor Products, Cactus Mat, R.C. Musson or equal.

1.7 RUBBER COVE BASE

All topset cove bases shall be minimum 4" high, rubber or vinyl, from continuous rolls. All joints to be tight-butted and sealed. 5/8" standard toebase. Roppe or equal, uniform color full thickness.

1.8 RESILIENT EDGE STRIP

Provide vinyl transition strips at floor material transitions. Finished transitions greater than one-fourth inch (1/4") high shall be beveled or ramped per code. (WAC 51-20-3100)

1.9 RUBBER FLOORING

24" x 24" x 3/16" thick (or as standard by manufacturer), studded rubber tile and/or one-fourth inch (1/4") thick full width stair treads with matching risers. American Floor Products, R.C. Musson, Flexco, or equal.

SECTION 09680 - CARPET

1.1 DESCRIPTION OF WORK

Provide broadloom carpet typical in all areas, except as otherwise shown or specified. Provide materials and items required for complete installation of products and accessories. Comply with Division 1.

1.2 SUBMITTALS

Submit to DRES Architect the following: complete specifications and manufacturers' color samples for each type of carpet; manufacturer's installation and maintenance instructions; all applicable warranties, and all pertinent MSDS documents. Provide carpet recycling plan.

1.3 CARPET

TYPE:	Level Loop
YARN TYPE:	100% Nylon (DuPont Antron Lumena, BASF Zeftron, or approved equal)
YARN SYSTEM:	Continuous Filament
DYE METHOD:	Solution
PILE WEIGHT:	26 Oz. minimum
PILE HEIGHT:	.130 minimum
GAUGE:	1/10 minimum
DENSITY:	6,500 minimum, per ASTM D-418
PRIMARY BACK:	Synthetic
SECONDARY BACK:	ActionBac or approved equal
FLAMMABILITY:	Class I, per ASTM E648; smoke density less than 450 per NFPA-258
STATIC CONTROL:	Permanent 3.5 KV
COLOR:	As approved by Agency

Glue directly to substrate with recommended adhesives (See Section 09680, 1.4 for adhesives) to ensure that warranties will remain in effect; 10-year wear warranty, two-year written installation warranty. All carpet shall be from the same dye lot. Products utilizing olefin are unacceptable. Edges at floor access panels shall be bound. See Section 09650 for rubber base requirements.

1.4 ADHESIVES

Provide low-VOC adhesives as recommended by carpet manufacturer. Adhesives must be certified low-VOC by the CRI Indoor Air Quality Adhesive Testing Program.

1.5 PREPARATION

Areas to receive carpet to be clean, dry, and dust-free. All depressions, cracks and irregularities to be filled with low-VOC floor patch compound as recommended by floorcovering manufacturer. All ridges and high spots to be ground smooth to a level floor. Proceeding with carpet installation constitutes installer's acceptance of the responsibility for correction of unacceptable work due to floor conditions. (See Part A5.1)

1.6 INSTALLATION

Strictly adhere to carpet manufacturer's written installation instructions, as well as CRI Commercial Installation Standard 104 as pertains to project scope. Manufacturer's instructions shall take precedence over CRI 104. Provide adequate fresh air ventilation during the entire installation process and for 48-72 hours afterward. Vacuum-clean and shampoo old carpet prior to removal to minimize the release of airborne particulates.

Broadloom installation shall be by the direct glue-down method. Carpet tiles shall be installed using the "Lift" method for occupied spaces, and per manufacturer's instructions for unoccupied areas. Installation shall be warranted against failure, including loss of adhesion, improper site preparation, and poor workmanship.

1.7 FINISH CONDITION

All carpet is to be vacuumed and free of debris just prior to tenant occupancy. Carpet is to be free of spots, dirt or adhesive, and be without tears, frays or pulled tufts.

1.8 MAINTENANCE

Lessor shall maintain the carpet according to manufacturer's recommendations, in a manner which provides a safe and healthy environment for the occupants. Maintenance shall be consistent with CRI recommendations: vacuum cleaning shall be done with a high-efficiency particulate filter bag, and all moisture and cleaning agents shall be removed with each cleaning.

SECTION 09900 - PAINTING

1.1 DESCRIPTION OF WORK

Provide painting as shown and specified. Work includes preparation and painting of all existing opaque painted surfaces in all rooms that are a part of this project, including doors, windows, trim, shelving, casework, etc, and other existing surfaces as well as new surfaces called to be painted. All surfaces recognized as paintable shall be painted. Work also includes preparation, stain and varnish of all new and existing stained/varnished surfaces in all rooms that are a part of this project and other areas that are disturbed by work under this project.

1.2 SUBMITTALS

Submit material list and samples to the DRES Architect for selection and approval. Provide non-V.O.C. paint products: Glidden, Best, or equal. If V.O.C. products are used, they shall be applied off-site or after normal work hours, and in well-ventilated areas.

1.3 PAINTING SCHEDULE

Gypsum Wallboard Finish System

Typical: One (1) coat primer/sealer, two (2) coats orange peel texture semi-gloss enamel. Toilet rooms: One (1) coat primer/sealer, two (2) coats epoxy paint. Apply other finishes as shown, specified or necessary.

Clear Finishes

Finish hardwood veneer doors and wood frames with one (1) coat of stain, two (2) coats of semi-gloss finish on all surfaces.

Painted Metal

Paint primed hollow metal doors, frames and other exposed ferrous metal with two (2) coats of gloss enamel. Prefinished metal frames to have a minimum of eight (8) standard colors for the DRES Architect's selection.

End of Division 9

DIVISION 10 - SPECIALTIES

SECTION 10000 - SPECIALTIES

1.1 SUMMARY OF WORK

Some items specified below may not be part of this project. Provide and install all materials, accessories, etc. required for the items indicated on the drawings, and/or other divisions in the specifications. Specialty products may include the following if indicated on the drawings: access floor, corner guards, lockers, mail boxes, metal and prefabricated shelving, operable partitions and folding doors, pay telephones, freestanding covers and shelters, and display boards.

SECTION 10150 - COMPARTMENTS AND CUBICLES

1.1 DESCRIPTION OF WORK

Provide toilet partitions and urinal screens in all restrooms as shown and specified. Standard 36" wide stalls, with 24" clear door typical. Comply with all applicable provisions of WAC 51-20.

1.2 SUBMITTALS

Manufacturer's Data: Submit product literature showing construction finishes, hardware, accessories, fasteners and full range of color samples for selection, review and approval by DRES Architect.

1.3 TOILET PARTITIONS AND URINAL SCREENS

Ceiling-mounted, plastic laminate, (painted steel for public restrooms at leased facilities greater than 10,000 square feet), with stainless steel fittings, door returns to preset positions, steel core pilasters, one (1) coat hook in each stall. Support each urinal screen with four (4) mounting brackets. All brackets to have solid blocking for anchorage. Manufacturers may be Bobrick 1048 Series, AAMCO, METPAR or equal.

SECTION 10350 - FLAGPOLES

1.1 SUMMARY OF WORK

The work includes the furnishing and installation of a flagpole. Extent and location of flagpole as shown on the drawings, or as approved on-site by DRES Architect and the Tenant Agency.

1.2 DESCRIPTION OF WORK

Provide 30' aluminum flagpole, complete with fittings and lockable halyard control by Concord Industries, Inc. or equal. Illuminate flagpole with photocell switch-controlled underground light fixture. Provide all appropriate support and foundation as recommended by the flagpole manufacturer.

SECTION 10400 - IDENTIFYING DEVICES

1.1 DESCRIPTION OF WORK

The basic requirements include the building sign when State agencies occupy 100 percent (100%) of the building. Lessor shall submit site standards for signage to DRES Architect for review and compliance, and shall provide the State-occupied facility with the appropriate signage allowance within those standards. Provisions for other signage are as specified.

1.2 SUBMITTALS

Submit sign shop drawings for approval by the DRES Architect before sign fabrication.

1.3 SIGNAGE FOR BARRIER-FREE ACCESS

International symbol of access signs shall have white symbol on blue background, approximately 6" x 6". The symbol shall be displayed to identify accessible features including the following: public entrances, restrooms, showers, etc. Provide visible and tactile signs, including Braille, to identify restrooms, stairs, elevators, mechanical equipment rooms, non-movable wall rooms, and any other area hazardous to visually impaired persons.

Provide additional barrier-free signs as required by code.

1.4 BUILDING IDENTIFICATION SIGN

If the building site allows free-standing signs, provide free-standing, vandal resistant, non-illuminated building identification sign. Andco post and panel 33B series or equal. Location as shown on the drawings or as approved on-site by DRES Architect and the Tenant Agency. Submit drawing and brochure for review and approval by DRES Architect.

If the site is not conducive to a free-standing sign, then the same general design parameters will apply to a building-mounted sign (either on the exterior wall or on the windows nearest the main entry).

Size

60" x 30" with two posts each sign.

Letter Style And Size

Helvetica, medium letter style. Size of letters to be proportional to size of sign.

1.5 BUILDING DIRECTORIES

If the building is occupied by multiple tenants or by more than one State Agency, the Lessor shall provide building directories.

Size

36" x 29", or as approved by DRES Architect.

Material

Non-illuminated, black aluminum frame with plastic face.

Mounting

Mount with vandal-resistant anchors directly to building face.

Letter style and material

White vinyl, Helvetica, medium style letters.

1.6 ENTRANCE DOOR SIGN

Provide signage as required under Division 8, Section 08400, and utilizing white vinyl, Helvetica, medium style letters, unless approved otherwise by DRES Architect and the Tenant Agency.

1.7 RESTROOM SIGNS

Provide 6" x 6" accessibility sign, 1/8" plastic, screw-anchorage, with stainless steel screws. "Men" and "Women" signs with 2" high tactile white letters on blue background. One (1) sign that includes both may be provided at unisex rooms and vestibules. Provide "Men" and "Women" picture image signs on public restroom doors.

SECTION 10500 - FIRE PROTECTION SPECIALTIES

1.1 FIRE EXTINGUISHERS

Provide and maintain fire extinguishers as required by all governing codes and/or the DRES drawings. Tenant Agency may provide supplemental extinguishers.

1.2 CABINETS AND ACCESSORIES

Provide recessed or semi-recessed cabinets in locations shown on drawings, or as required by local Fire Marshall. Provide fire hoses as required by governing codes. Maintain fire-resistive construction of walls.

SECTION 10650 - OPERABLE PARTITIONS

(See Section 08300)

SECTION 10800 - TOILET AND BATH ACCESSORIES

The following fixtures are pre-approved models. Verify with DRES Architect any other models and/or manufacturers that may be used on the project.

1.1 DESCRIPTION OF WORK

Provide vandal-resistant, commercial-grade toilet and bath accessories as shown and specified. Comply with all applicable provisions of WAC 51-40.

1.2 SUBMITTALS

Manufacturer's Data: Submit product literature for each item, unless it is from this pre-approved list.

1.3 TOILET PAPER HOLDERS

Provide one (1) for each stall. Bobrick B-274 60 or approved equal, two (2) roll type.

1.4 GRAB BARS

Provide one (1) for each accessible toilet stall and at all shower enclosures; stainless steel, 1-1/2" diameter. Bobrick B-6206 series or approved equal.

1.5 PAPER TOWEL HOLDERS

Provide one (1) for each two (2) lavatories. Bobrick B-262 or approved equal.

1.6 SOAP DISPENSERS

Provide one (1) for each lavatory and one (1) for each shower. Bobrick B-4112 or approved equal.

1.7 MIRRORS

Provide one (1) for each lavatory, or a full-length mirror to accommodate all lavatories. Plate glass with stainless steel trim, 24" x 36" minimum size with stainless steel shelf. Bobrick B-166 or approved equal.

1.8 TOILET SEAT COVER DISPENSERS

Provide one (1) for each toilet stall. Wall-mount above or adjacent to toilet, not to exceed 40" above finished floor in accessible stalls. Bobrick B-221 or approved equal.

1.9 SANITARY NAPKIN DISPOSALS WITH UTILITY SHELF

Provide one (1) for each Women's restroom stall. Bobrick B-254 and B-298 8” wide shelf or approved equal.

1.10 WASTE RECEPTACLES

Provide one (1) swing-top receptacle for each restroom. Bobrick or approved equal. For individual toilet room, use Bobrick B-279 or approved equal

1.11 BABY CHANGING STATION

Provide one (1) in each restroom, located as shown on the drawings. Koala Bear Kare Baby Changing Station, as manufactured by JBJ Industries, Inc., or approved equal.

SECTION 10810 - SHOWER ENCLOSURE

1.1 GENERAL

Where indicated on the drawings, provide either a fiberglass shower stall or a ceramic tile-lined shower enclosure complete with all fixtures, seats and grab bars. Provide shower curtain rod. Provide two (2) clothes hooks for each shower. Comply with all provisions of WAC 51-40, including dimensions and thresholds. Also see Sections 09300 & 15440 for related work.

1.2 LOCKERS

Provide single tier lockers as specified on plan.

End of Division 10

DIVISION 11 - EQUIPMENT

SECTION 11000 - EQUIPMENT

1.1 GENERAL

Lessor shall provide all equipment and systems that are required by all applicable codes.

Equipment will vary with project and may include elevators, fire sprinkler systems, manual fire alarm systems, building security access systems, burglar alarm systems, food service equipment, public address system, shower seats and halon fire protection system.

1.2 SUBMITTALS

Submit complete drawings and manufacturer's literature for review and approval by DRES Architect.

SECTION 11170 - SOLID WASTE HANDLING EQUIPMENT

1.1 GENERAL

Provide a refuse receptacle, location and size as recommended by local governing utility. Provide a level, concrete-paved surface with unrestricted access for garbage trucks, and locate on-site so as to be efficiently accessible to the building tenants. Provide a 6'-0" high screened enclosure surrounding the refuse receptacle pad or as appropriate for site.

End of Division 11

DIVISION 12 - FURNISHINGS

SECTION 12500 - WINDOW TREATMENT

1.1 SUMMARY OF WORK

Furnish and install new window coverings as specified or shown on the drawings, unless existing treatments are acceptable as agreed to in writing by DRES Architect prior to construction. Comply with Division 1.

1.2 SUBMITTALS

Submit complete manufacturer's product information including color ranges, solid and perforated, for review and approval by DRES Architect.

1.3 VERTICAL BLINDS

Provide on all exterior windows, vertical, 180 degree (180°) adjustable, traversing rigid vinyl louvers, model Excalibur manufactured by Levolor, or equal. Anchored at top and connected at the bottom with chain. Perforated blinds shall be 13 percent (13%) open. Verify perforations and color with DRES Architect.

End of Division 12

DIVISION 15 - MECHANICAL

SECTION 15410 - PLUMBING PIPING ACCESS

1.1 SUMMARY OF WORK

All valves and piping to be recessed, except clean-outs and flush valves. Provide access panels for individual valves as required for service and maintenance. Clean-outs to be flush with adjacent wall surfaces. Installation to include stop valves on water supply lines to permit repair without shutting off main building supply lines.

SECTION 15440 - PLUMBING FIXTURES

1.1 SUMMARY OF WORK & PRODUCT QUALITY

Upgrade existing restrooms and provide new restrooms as indicated on drawings. Provide top-quality commercial-grade American Standard, Kohler, or equal, plumbing fixtures, trim and accessories. Residential-grade fixtures, trim and accessories are not acceptable. Install according to best practice to ensure maximum service with low maintenance costs. Install fixtures and accessories to comply with provisions of WAC 51-40, WAC 51-26, and WAC 51-27, including mounting heights and accessible controls. Provide wall-mounted water closets, urinals, and lavatories using commercial-grade carriers. Flush valves and wall-mounted fixtures are required. Tank-type water closets are not acceptable, except at leased spaces less than 1000 sf, or as approved for the project by the DRES Architect. Provide lavatory with accessible commercial-grade single-lever fittings with tempered water.

1.2 FLOOR DRAINS

Provide self-priming floor drains with traps, one (1) in each restroom. Install flush with finished floor. Slope the floor within a 2' radius of the drain so as to effect positive drainage into the drain. Provide adjustable brass cover grille.

1.3 COFFEE BAR SINKS

Provide one (1) self-rimming stainless steel sink, measuring 15" x 17" x 7" with swivel gooseneck fitting providing tempered and cold water to each coffee bar. Also provide an instant hot water dispenser for each coffee bar. (See Section 15450)

1.4 SERVICE SINKS

Provide floor-type service sinks, Fiat or equal. Locate as shown on the drawings.

1.5 DRINKING FOUNTAINS

Provide accessible high-low wall-mounted refrigerated drinking fountain, Elkay ERHP2-8, Haws HT-ESR, or equal. Locate as shown on the drawings, minimum one per floor.

1.6 SHOWERS

Provide showers as shown on drawings. Recess floor structure for maximum 1/2" threshold. Provide accessible trim and an adequate supply of tempered water. (See Section 15450, 1.2). Provide floor drain at drying area. See drawings and Sections 10810 and 15450.

SECTION 15450 - HOT WATER EQUIPMENT

1.1 INSTANT HOT WATER DISPENSER

Provide one (1) instant hot water dispenser, Waste King QHD-780 or equal, for each coffee bar, unless indicated otherwise or as shown on the drawings.

1.2 HOT WATER HEATER

Provide a gas, if possible, hot water heater where estimated electric hot water heating cost exceeds $30 per month. Provide a circulation pump or additional water heaters where hot water delivery to fixtures exceeds 45 seconds. Smith or equal, quick recovery type, location as shown on the drawings or where appropriate so as to provide the most efficient service, sized in accordance with area use and/or as required to service the building. Provide 120 degree (120°) water to service sink. Plumb the relief valve to meet local codes and heater model requirements.

SECTION 15500 - HEATING, VENTILATING AND AIR CONDITIONING (HVAC)

1.1 SYSTEM SUPERVISION AND CERTIFICATION

HVAC systems for all new office space, and remodels affecting over 3,000 square feet of State leased space, shall have design work accomplished under the supervision of a licensed mechanical engineer. All projects shall be built to approved plans and specifications and meet State requirements. The designer shall certify that the final installation performs according to the mechanical and electrical design specifications of DRES. This written certificate shall be submitted to DRES upon completion of installation, certifying that the HVAC system installed in the building is in accordance with the approved plans and specifications, is clean (all filters have been changed just prior to tenant occupancy), properly balanced, fully operational, will perform satisfactorily, and meets the State's requirements, including the Washington State Energy Code (WAC 51-11) and the Ventilation and Indoor Air Quality Code (WAC 51-13).

The State will review the proposed mechanical system for conformance with these specifications, and, if necessary, make recommendations for modifications. The Lessor’s consulting engineer shall be responsible for system design, construction observation, and shall certify the completed system. The State will be represented at the Engineer’s Certification Inspection prior to Substantial Completion.

1.2 CALCULATIONS AND LOADS

The heating and air conditioning load calculations shall be made per this section, and in accordance with applicable codes indicated in Section 1.1 above.

Ventilation

New installations must comply with local code requirements, the Washington State Ventilation and Indoor Air Quality Code (VIAQ) and the Non-Residential Energy Code (NREC). The table below reflects the values given in the 1996 VIAQ converted to units of CFM per square foot for occupancies typical of State buildings. Multiply the appropriate value by the useable room square footage to get the outside air volume for each zone. Unless indicated otherwise, "exhaust or transfer air" vent rates refer to outside air via the zone air handler.

Table 15 C-1
Ventilation Rates

Space Type	Ventilation Rate 9 ft Ceiling Assumed	VIAQ table 3-4 Reference
Conference Rooms, Hearing Rooms, Public Service Areas, [1, 4]	1.0 cfm/sq.ft.	"Office, Conference Rooms"
Office Reception Areas [4]	0.9 cfm/sq.ft.	"Office, Reception Areas"
Training Rooms [4]	0.75 cfm/sq.ft.	"Education, Classroom"
Computer Rooms	0.14 cfm/sq.ft.	"Office, Office Space"
Corridors	0.05 cfm/sq.ft.	"Public Spaces, Corridors and Utilities"
Elevator Switch Rooms, Voice/Data/Equipment Rooms, Janitor's Closets	0.05 cfm/sq.ft. [2]	"Public Spaces, Corridors and Utilities"
Elevators	1.0 cfm/sq.ft. [2]	"Public Spaces, Elevators"
Laboratories	0.6 cfm/sq.ft. [3.]	"Education, Laboratories"
Libraries	0.3 cfm/sq.ft.	"Education, Libraries"
Lunch Rooms	0.3 cfm/sq.ft. [2]	"Food and Beverage Service, Kitchens (Cooking)"
Offices	0.14 cfm/sq.ft.	"Office, Office Space"
Restrooms	50 cfm/fixture [2]	"Public Spaces, Public Restroom"

Footnotes

1. Public Service Areas are high-density office reception areas such as food stamp, licensing, and unemployment compensation waiting areas
2. Exhaust or "transfer air"
3. Consider fume hoods
4. Consider using the exception to Section 3.4 of the Ventilation and Indoor Air Quality Code (52% clause).

Load Calculations

HVAC systems shall be sized in accordance with the following table values and ventilation rates shown above. The designer shall utilize either a commercially available computer program designed for this purpose, a spreadsheet, or hand calculations to assist in sizing all heating and cooling equipment. Methods shall be as described in ASHRAE F26. Load calculations supporting equipment selections shall be submitted to the DRES Architect with drawings for review and approval. Documents shall provide sufficient detail to accurately describe the intended system. When adding a load to existing systems, calculations will show the existing equipment adequate to supply this load without compromising conditions in other areas.

Table 15 C-2
Heating and Cooling Load Requirements Summary

Item	Heating Load	Cooling Load
General Calculation Method	ASHRAE F26.16 or approved program	ASHRAE F26.17 or approved program
Indoor Design Temperature	70° F	74° F
Outdoor Design Conditions	See Table 15 C-4	See Table 15 C-4
Equipment, People, Lights, Solar Heat Gains	**Not included** in load	Include in load
Infiltration Rates, CFM/SF Wall		
Tight	0.1	0.1
Average	0.3	0.3
Leaky	0.6	0.6
Safety Factor	**add 20%**	**add 20%**

Table 15 C-3
Miscellaneous HVAC Loads (Watts/SF)

Space Type	Lighting	Equipment
Office	1.2	0.75
Classroom, Day Care, Conference	1.35	0.5
Classroom w/ Computers	1.0	2
Voice/Data/Equipment Room	1.0	12
Retail	5	0.5
Assembly, Theater, Gym	1	0
Corridor	0.8	0
Laboratory	2.0	2.0

Table 15 C-4
Outdoor Design Conditions

	Winter (See Note)	Summer (See Note) (measurements taken simultaneously)	
Vicinity	**Dry Bulb (°F)**	**Dry Bulb (°F)**	**Wet Bulb (°F)**
Aberdeen	25	80	65

Bellingham	10	81	67
Bremerton	21	82	65
Colville	-8	93	64
Ellensburg	2	94	65
Everett	21	80	65
Kennewick	5	99	68
Longview	19	88	68
Moses Lake	1	97	66
Olympia	16	87	66
Port Angeles	24	72	62
Republic	-10	93	64
Seattle	22	85	68
Spokane	-6	93	64
Tacoma	19	86	66
Vancouver	17	89	68
Walla Walla	0	97	67
Wenatchee	7	99	67
Yakima	-2	96	65

Note: Table values are from the 1993 ASHRAE Fundamentals, Chapter 24, Table 1, Winter 99% and Summer 1% columns.

1.3 SYSTEM DESIGN

The HVAC system shall provide fully ducted supply air. The use of transfer grilles is permitted to return air from rooms under 170 gross square feet in area, provided they consist of a pair of grilles connected with ductwork with a minimum of two bends designed and installed to prevent sound transfer from room to room. Rooms utilizing transfer grilles must be on the same system. In variable air volume systems with constant volume series fan-powered boxes, transfer grilles are permitted up to the maximum design cooling capacity of the room served provided the room has direct return air to the fan-powered box. Multiple transfers in series are not permitted. System shall provide outside air ducted directly to the air handling units at all times during occupancy. (See Section 15500, 1.3.6)

Ductwork shall be constructed of galvanized steel installed per Sheet Metal and Air Conditioning Contractor's National Association (SMACNA) Standards. The need for fiberglass duct linings shall be minimized by design of ductwork for low velocities. Where used, fiberglass duct liner shall have a coated surface on the airstream side which prevents fiber release. Cut edges of liner materials shall be sealed in accordance with manufacturer's recommendations. Acceptable manufacturers are Owens-Corning, Schuller, Knauf, Certain-Teed, or approved equal. Flexible duct shall be factory insulated type with vapor barrier jacket, one-inch fiber glass insulation, zinc coated steel spring helix reinforcement, bonded to polyester or mylar liner. The use of flexible ductwork shall be limited to runs of 8 feet. All materials shall comply with UL 181 listed with flame-spread rating not over 25, smoke-developed rating not over 50.

Designs, including hydronic systems, shall include balance drawings and schedules which clearly depict air volumes and flow rates for both air and water required at each register, inlet, exhaust, or tap point. Should the designs involve modifications or additions to existing systems, the designs will include such balance drawings for the entire system, not just the portion included in the rework.

The ratio of supply and exhaust air shall be such that the building shall be under slight positive pressure at all times. When economizers are used, controls shall be provided so that outside air is used for the first stage of cooling, supplying a maximum of 100% outside air when outdoor temperatures are sufficiently low to provide the necessary cooling.

1.3.1 FILTRATION

Air filters shall be rated at 25-30% average atmospheric dust spot efficiency with an average arrestence rating of 90-95% when tested in accordance with ASHRAE 52-76 Standard. Return air in a plenum system shall be filtered at the terminal box before entering system.

1.3.2 NOISE

Allowable system noise levels shall be as per Room Criteria (RC) curves in ASHRAE Systems Chapter 43. As maximums, private offices and conference rooms will be RC 35, with open offices RC 40, and circulation, public areas, and computer rooms RC 45. Plenum return systems must restrict noise transfer to adjacent occupied areas. See Section 07200, 1.2.

1.3.3 ZONES

Provide separate perimeter zones at a minimum of one zone for each exterior exposure per floor, with an additional zone for the interior. Provide each zone with separate temperature controls and temperature sensors. Provide separate zones for special purpose rooms such as conference rooms and training rooms. The system designer shall verify cooling loads with project team before completing design, then submit drawings showing zone and thermostat locations to DRES for review and approval before beginning construction.

Provide separate ventilation and cooling equipment with 24-hour air conditioning and separate controls for all voice/data/equipment and computer rooms. Exception: An exhaust fan system will be considered for rooms generating less than 800 BTUs.

1.3.4 CONTROLS

Adequate controls shall be provided within the leased space to ensure satisfactory temperature control under the varying load conditions in each zone. The controls shall not be located above office equipment such as photocopiers, printers, kitchen appliances, etc. The automatic controls shall efficiently control the air temperature in all parts of the leased space and in each zone. The controls shall be completely automatic, 24-hour, 7-day programmable with override switch for easy off-hours operation. Provide commercial electronic, programmable, lock-out thermostats, or monitored Energy Management System within the leased space. (See Part A2.4)

1.3.5 BUILDING EXHAUST SYSTEM

Restrooms, showers, mechanical, electrical, janitor rooms, and enclosed copy/workrooms shall receive supply or "transfer" air only and be exhausted directly* to the exterior of the building to prevent air from being recirculated to other rooms**.** Provide separate exhaust system for venting hazardous gasses from laboratories and similar spaces**.** Exhaust fans shall be installed on roof or in mechanical equipment rooms, or shall be readily accessible in-line fans (maximum sound level classification of 9.0 Sones at 0.125 inches static pressure) with direct-drive motors (1050 maximum available rpm) with

solid-state speed control switches for balancing, unless DRES-approved otherwise. System/fans shall be controlled by automatic 7-day timer or local timer switch, depending on application (Ventilation–Table 15 C-1). All exhaust shall be ducted to outside of building away from air intakes. Exhaust systems shall be interlocked with the building HVAC system controls, and operate during the same time that the building is occupied, including manual override unless DRES-approved otherwise. Intermittent or source specific exhaust systems which do not operate continuously during the occupied mode shall be interlocked with the building HVAC system controls to provide necessary makeup air required during operation. See 15500, 1.3.3 for voice/data/equipment and computer rooms.

[*]*A common exhaust system may be used to exhaust from several of these rooms provided each room is operated on the same time schedule.*

1.3.6 AIR DISTRIBUTION

The quantity of supply diffusers and return air grilles shall be sufficient to provide even air distribution throughout the zone. They shall be located in response to the final space plan/work station layout to minimize air blowing directly on individual work stations; but in all cases each supply diffuser shall have a serving area not exceeding 250 square feet and each return air grille shall have a serving area not exceeding 1000 square feet. Provide appropriately sized diffusers, Carnes series SK, Anemostat series E, Krueger series 1400, Titus TMS, or equal. Diffusers shall have sound ratings at design air flows of below NC 27. Each diffuser shall have a dedicated and accessible duct-mounted volume damper. Perforated grilles on supply diffusers are not acceptable.

1.4 HUMIDIFICATION

Where specifically required by Agency addendum, humidification systems shall be provided to maintain system air at a minimum of 35% relative humidity under outdoor conditions of 20° F Dry Bulb and 70% relative humidity.

1.5 SYSTEM PERFORMANCE

The following pertains to operation of HVAC systems, and should not be used as design criteria. Design conditions are covered in preceding sections on loads and design. HVAC systems shall be considered to be performing in an acceptable manner if they maintain a normal daily operating temperature of 70° F ± 2° F throughout the year, with a maximum allowable variation of ± 4° F under extreme outdoor design conditions as listed in Table 15 C-4. In addition, during the heating season on a design day, systems shall be capable of attaining a temperature within this acceptable range within 3 hours of switching from a 10° F setback.

End of Division 15

DIVISION 16 - ELECTRICAL

SECTION 16000 - ELECTRICAL

1.1 GENERAL

Provide complete distribution system as required for mechanical and electrical equipment, standard power, isolated power, lighting system, and other equipment as indicated on the drawings and/or specified herein. (See Part A5.13 through A5.15)

1.2 QUALITY ASSURANCE AND GUARANTEES

Provide spec-grade devices. Wires shall be attached to receptacles, switches, and fixtures by a positive clamping method that can be tightened and secured by a screw. "Stab Lock" attachment method is not acceptable.

1.3 SUBMITTALS

Submit all data to DRES for review before installation as follows: Catalog cuts showing manufacturer, catalog number and complete specifications including rating, finish, dimensions, kind of materials, etc. Also submit ceiling lighting layout.

SECTION 16400 - POWER CIRCUITS (DEFINITIONS)

1.1 SUMMARY OF THE WORK

Provide a maximum of six (6) duplex standard-power receptacles per circuit. Separate the mechanical power and resistance circuits from receptacle circuits. Locate in separate panels when more than one (1) panel is used. Provide dedicated (separate) and special power circuits as shown on plan described herein. Identify all circuits on panel box and mark each receptacle with its appropriate circuit number with a visible, indelible marking.

1.2 DEFINITIONS

The following definitions shall be utilized for the explanation of electrical symbols delineated on the drawings. The examples of use are typical, but can vary for different tenant agencies. Equipment should be powered as recommended by the manufacturer.

Dedicated Receptacle

The sole receptacle served by a dedicated powered circuit. Connect to common ground. Only one simplex, duplex or fourplex receptacle allowed per circuit (usually 20-amp). Identify each receptacle with a red dot. Typically used for equipment and appliances: refrigerators, microwaves, vending machines, photocopiers, laser printers (verify), etc.

Isolated Dedicated Receptacle

The sole receptacle with “clean” power served by a dedicated powered circuit. See IG Receptacle definition below for information about circuit breakers. Run separate isolated, insulated ground wire from receptacle to the IG floating grounding bus in panel, with the IG bus connected to common ground at service entrance. Only one simplex, duplex or fourplex receptacle allowed per circuit (usually 20-amp). Fixture shall be orange with a red dot. Typically used for: computer mainframes, LANs, file servers, PCs and other microprocessor based equipment.

Isolated Ground (IG) Receptacles
Receptacles with "clean" power from a 120v, 60Hz, single phase, 20-amp branch circuit with a separate insulated ground wire that runs from each isolated-ground (orange) receptacle to the panel box. IG circuit breakers shall serve only IG receptacles. Group IG circuit breakers together in the main panel (or sub panel) or into a separate subpanel exclusively for IG circuits. If in a branch circuit panel box, run the isolated ground wires to a special insulated separate IG ground bus. Run an insulated ground wire from the IG bus to the service entrance. This grounding conductor may pass through one or more panel boxes without any connection to the panel box grounding terminal. Connect the IG ground, neutral, and standard ground at the service entrance **only**. Up to four duplex receptacles may be served from a single 20-amp circuit. IG receptacles shall be orange. Typically used for desktop computers.

Standard Receptacle
A 120v, 60Hz, single phase, 20-amp power receptacle served from a standard branch circuit. Connect to common ground. Up to six duplex receptacles may be served from a single 20-amp circuit. Used for task lights, desktop appliances, and general convenience.

SECTION 16500 - LIGHTING

1.1 SUMMARY OF THE WORK
Provide lighting fixtures in all locations shown on the drawings. Energy consumption for lighting must comply with State of Washington and other applicable local energy codes.

1.2 FIXTURE INSTALLATION
Fixtures to be connected with six feet (6'-0") of flex conduit to allow repositioning in ceiling grid to provide required illumination at desks. Locate fixtures as required for individual desk locations. Provide #12 AWG wire for seismic anchor.

SECTION 16510 - FIXTURE TYPES

1.1 SUMMARY OF THE WORK
Provide high-efficiency energy-saving type recessed fluorescent fixtures, with parabolic lenses having a cell size from 2" x 2" to 6" x 6" square cells, energy-saving ballasts, and energy-saving T-8 tri-phosphorous lamps with a 3500° K.(+) rating and a minimum color rendering index (CRI) of 80.

SECTION 16520 - LIGHTING LEVELS

1.1 WAITING, STORAGE, RESTROOMS AND HALL AREAS
Provide a minimum of 50 foot-candles illumination in waiting, storage areas and restrooms. Hallways to have a minimum of 20 foot-candles illumination. Per Illumination Engineering Society (IES) Lighting Handbook.

1.2 OFFICES, OPEN OFFICE AREAS
Provide a minimum of 55 foot-candles illumination at all work surface desk level locations. Coordinate light fixture locations with cubicle layout in open office areas. Per IES Lighting Handbook.

1.3 OPEN PARKING AREAS
Provide illumination per IES lighting standards for pedestrian security, no less than required to provide complete illumination of exterior areas leading from facility/structure to parking areas. Provide ten foot-candles (10 fc) where video surveillance is provided.

SECTION 16600 - COMPUTER ISOLATED POWER SYSTEM

1.1 SUMMARY OF THE WORK

Where required as a tenant improvement and shown on DRES drawings, provide isolated 120-volt power circuits with separate insulated ground wire throughout to separate ground bus in main panel.

Identify with orange receptacle and identify in panel box. Group isolated power circuits together or provide separate panel box. Provide one (1) circuit for four (4) isolated-ground duplex receptacles maximum.

1.2 CALCULATIONS

NOTE: Provide proper power to all computer equipment; do not overload circuits.

Calculations for the number of workstations are based on the following:

Typical

1 personal computer (CPU) *(Check equipment nameplate)*	2.70 amps
1 monitor *(Check equipment nameplate)*	.95 amps
Total	3.65 amps

A 20-amp circuit design load is 80 percent (80%), or 16 amps.

$16A \div 3.65A = 4.38\pm \approx 4$ computers

Dot matrix printers should be plugged into the regular standard-power receptacle. Laser printers should be plugged into isolated-ground receptacles. Laser printers should have circuits verified for electrical load. It is recommended that they have their own dedicated-isolated ground. The loads are:

Dot matrix	1.00 amps
Laser	7.60 amps

These loads shall be verified by the electrical information plate on the computer or by referencing its manual. A 20-amp circuit is needed for one PC, monitor, and laser printer.

SECTION 16610 - POWER EQUIPMENT

1.1 FLOOR BOX SERVICE FITTINGS

Provide recessed boxes and durable flush-floor metal covers for service fittings at open office locations. Walker, Hubbell, or DRES-approved equal.

1.2 SERVICE POLES (Power Duct Posts)

When service poles are shown on DRES drawings, provide 6'-0" flex electrical connection to allow repositioning. Install J-box in locations shown on DRES drawings. Exact service pole locations and pole installation to be determined by furniture placement at the time of move-in by the State Tenant Agency, and by the ceiling grid location. Provide power hook-up to electrified panel splines where shown on drawings.

SECTION 16700 - VOICE/DATA/EQUIPMENT ROOMS

1.1 GENERAL

Contractor to coordinate with, and provide site access to, the State Department of Information Services and with the telephone/data vendors and/or contractors. Coordinate in the placement of all rough-in requirements and all State-supplied equipment that is required for a proper functioning telephone system within the project schedule.

1.2 INSTALLATION/FITTINGS

Provide rough-in system as required for complete standard installation of equipment, cable, and accessories. Provide 1" conduit to ceiling access where required for wall outlets, J-box and cover plate. Conduit to have 90 degree (90°) long sweeping bends at ceiling access spaces.

NOTE: J-box and conduit required only where location is in walls or partitions. Provide standard flush-floor box service fittings for open office locations except at existing slab-on-grade.

1.3 VOICE/DATA/EQUIPMENT ROOMS

Do not locate the building electrical panels in, adjacent to, or on a common wall with the voice/data/equipment room. Provide two (2) 120V dedicated outlets on one dedicated 20-amp circuit for telephone equipment, location as required by the State Department of Information Services. Provide two (2) 4" diameter conduit sleeves for voice/data pathway from building service drop to voice/data/equipment rooms. In addition, provide two (2) 4" diameter conduit sleeves through floors from equipment room and through floors or ceiling into the voice/data distribution rooms. (See Section 06200, 1.4 for wall requirements.)

SECTION 16900 - SWITCHING

1.1 SUMMARY OF THE WORK

Switch each room separately. Switching shall include multi-level switching (having the capability to activate either one, two or all three tubes of the light fixture at the discretion of the tenant) or perimeter ("daylight") switching, as required by WAC 51-11. Switching from main office areas to be efficient and effective to accommodate building use by employees at night and weekends. Provide three-way switching as required or shown on the DRES drawings. Circuit breakers used as switches are not acceptable. Proposals for alternative light switching methods such as programmable switching will be considered by DRES Architect.

End of Division 16

END OF SPECIFICATIONS